NCUB
National Centre for Universities and Business

Easy Access IP:
A Preliminary Assessment of the Initiative

Delivered by IP Pragmatics Ltd to the National Centre for Universities and Business

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IP PRAGMATICS

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Any errors or omissions remain the responsibility of the authors.

Report compiled by
Elaine Eggington
Ronnie Georghiou
Jon Burdach
of IP Pragmatics Ltd

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01. Executive Summary

Easy Access IP is an approach to knowledge exchange (KE) between Universities and business under which research institutions offer a free licence to a specific technology, using a simple, non-negotiable, one-page agreement.

In return for the licence, the recipient must commit to using the technology to create value for society and the economy, and to acknowledge the role of the Institution as the originator of the intellectual property (IP). The Easy Access IP model was first introduced at the University of Glasgow in 2010, in response to a desire to focus their commercial efforts onto a small proportion of potentially high value opportunities, and to give free access to the remainder of their IP to companies and individuals so that new products and services can be developed that will benefit society and the economy. By the start of 2015, Easy Access IP had been adopted by 24 Universities and research organisations both in the UK and abroad.

IP Pragmatics Ltd has carried out a preliminary assessment of the contribution of this Easy Access IP initiative to speeding the application and commercialisation of IP from Higher Education Institutions (HEIs). In this initial analysis, we have gathered evidence from HEIs about how the scheme is used, and the deals that have been concluded using the approach. We recognise that it is too early to be able to draw any firm conclusions as to the success of the scheme; instead we aimed to get a thorough understanding of the current viewpoint of the participating Universities, and to build a database of the deals which have been done. We collected publicly available data, and carried out interviews with 75% of the participating organisations.

Key Findings

- It is still too early to judge the success of the scheme for most participants.
- A total of 68 Easy Access IP licence deals were reported by 18 organisations in this survey; this number is small compared with the number of traditional licences agreed in the same time period (677 deals reported by 14 organisations).
- Most participants are using Easy Access IP licences only very occasionally, and for only a small proportion of the licences that they sign. Two-thirds of the reporting organisations have completed an Easy Access IP deal only once or not at all.
- Two organisations between them have carried out about 66% of the reported Easy Access IP deals. The University of New South Wales have made it the core of their knowledge exchange approach and the default mechanism of industry engagement, which they believe is responsible for their higher level of Easy Access IP deals.
- Even where the scheme is not heavily used, the majority of participants find it a useful addition to the range of KE mechanisms available to them, and all intend to remain partners and continue to use the scheme where appropriate.
- The scheme works best with an internal champion and/or senior management support and where business development and technology transfer are closely aligned. For example, the originator of the scheme is a current or previous employee of the two most active Universities.

- It provides an IP exploitation framework with diverse niche applications which are useful for different organisations, for example:
    - » as a hook to leverage other industry interactions;
    - » to handle the outputs of collaborative research;
    - » to facilitate social and student enterprise;
    - » to easily return IP to the inventor;
    - » for local SME engagement;
    - » to align KE activities with an ethos of achieving Impact and to capture this activity.
- The contribution of Easy Access IP to improving the commercialisation of IP for the participants is relatively small, but can be additive to other activities and can lead to other relationships.
- It does not replace the traditional routes for exploitation of high value opportunities.
- The Easy Access IP brand is a valuable marketing tool both to academics and to potential industry partners, and sends a positive message that the organisation is open and easy to work with.
- It reduces the staff time and legal costs of the transaction stage, but not the earlier marketing and partner identification stage. This means it saves more time and money for the company partners than the University partners.
- Easy Access IP appears to be useful across the full range of technology subject areas, types of IP and stages of development.
- Most deals are currently done with SMEs which are located close to the University. This may reflect the way that the scheme is being used by the participants, as well as the types of organisation which have adopted Easy Access IP.
- There is no evidence that it has caused industry to expect all IP to be available for free.
- The concepts of simple agreements and free licences are not new, and many organisations that are not partners of Easy Access IP achieve similar aims through other mechanisms without the Easy Access IP label.
- Costs and risks of development, difficulties in reaching potential partners, and lack of commercial potential may be more important constraints to wider uptake of University IP.
- Easy Access IP has widened the debate about KE mechanisms, and added another approach and more flexibility to the KE toolkit which is helpful.

02. Background

Easy Access IP[1] is an international collective of Universities and Research Institutions which have adopted an open opportunity mechanism which allows free access to some of their technologies to companies and individuals, so that new products and services can be developed that will benefit society and the economy.

The scheme offers a free licence to a specific technology, using a simple, non-negotiable, one-page agreement. In return for the licence, the recipient must commit to using the technology to create value for society and the economy, and to acknowledge the role of the Institution as the originator of the Intellectual Property (IP). The Easy Access IP model was first introduced at the University of Glasgow in 2010, and then expanded into the Easy Access Innovation Partnership, led by the University of Glasgow, King's College London, and the University of Bristol using funding from the Intellectual Property Office's Fast Forward funding competition in 2011. Easy Access IP has since been adopted by other Universities and research organisations both in the UK and abroad. At the beginning of 2015, 24 organisations are known to be using Easy Access IP. The full list of partner organisations is shown in Appendix 1.

In their response to the House of Commons enquiry into the Valley of Death[2], the Department for Business Innovation and Skills (BIS) asked the National Centre for Universities and Business (NCUB) to assess the contribution of this Easy Access IP initiative to speeding the application and commercialisation of IP from Higher Education Institutions.

IP Pragmatics was commissioned by the NCUB to carry out a preliminary assessment of the Easy Access IP initiative. In this initial analysis, we have gathered evidence from Universities about how the scheme is used, and the deals that have been concluded using the approach. We recognise that it is too early to be able to draw any firm conclusions as to the success of the scheme, but we wish to begin to assemble the evidence to inform the ongoing discussions about the advantages and potential pitfalls of Easy Access IP, and how it fits into the wider context of the range of mechanisms for Knowledge Transfer from Universities to the commercial world. At a later date, we hope to be able to extend our work to investigate the view of the scheme from the company side, and to examine other viewpoints and complementary approaches.

The research aims to get a thorough understanding of the viewpoint of the participating Universities, and to build a database of the deals which have been done. We have used these data to draw some preliminary conclusions about the types of intellectual property and company interactions that may be suited to the scheme. We have also investigated the perceived problems which the scheme was intended to address, and examined the evidence about how well this has been achieved.

The current investigation aims to provide a full picture of Easy Access IP from the viewpoint of the participating Universities. This picture has been placed in the context of alternative methods of Knowledge Transfer. It has been informed by anecdotal evidence from non-participating Universities and from companies, but it is not within the scope of the current work to gather robust evidence or comparative data from these groups.

1 See www.easyaccessip.com

2 Science and Technology Committee. 2013. Bridging the valley of death: improving the commercialization of research: Government Response to the Committee's Eighth Report of Session 2012-13. (HC 559, 2012-13). London: The Stationery Office. [Online] Available from: www.publications.parliament.uk/pa/cm201314/cmselect/cmsctech/559/559.pdf

03. History of Easy Access IP

The concept of Easy Access IP arose from a debate at the University of Glasgow between Professor Miles Padgett (now Vice-Principal for Research) and Dr Kevin Cullen (then Director of Research & Enterprise). The debate centred on whether Universities should disseminate their research as widely as possible and make it available for free, or whether for some technologies the investment needed to take them to market means that they need to be protected by intellectual property to provide a proprietary position. Kevin Cullen was tasked with identifying a business model for the University which could reconcile these conflicting approaches.

This led eventually to the Easy Access IP approach, in which the commercial efforts in the Technology Transfer Office (TTO) are focused on the small number (say 5%) of opportunities that are likely to generate the vast majority (say 95%) of the commercial returns for the University. The remaining lower value opportunities are instead offered to industry for free, using a simple agreement. This removes the perceived barriers that Universities may be difficult to deal with, and overvalue their technologies. Instead, these technologies can be used to:

- Initiate dialogue with industry, based on exploitation of the IP.
- Build relationships and trust that would lead to an increase in research collaborations.
- Align the TTOs mission with that of the University to disseminate knowledge and enable research to be used.

In taking this approach, the University of Glasgow acknowledged that although higher pure financial profit to a University may come from a successful licence or spin-out, it may be more important to the organisation to generate turnover and enable more research through collaborative funding, as illustrated in the diagrams below, taken from "Scottish Universities in the Marketplace"[3].

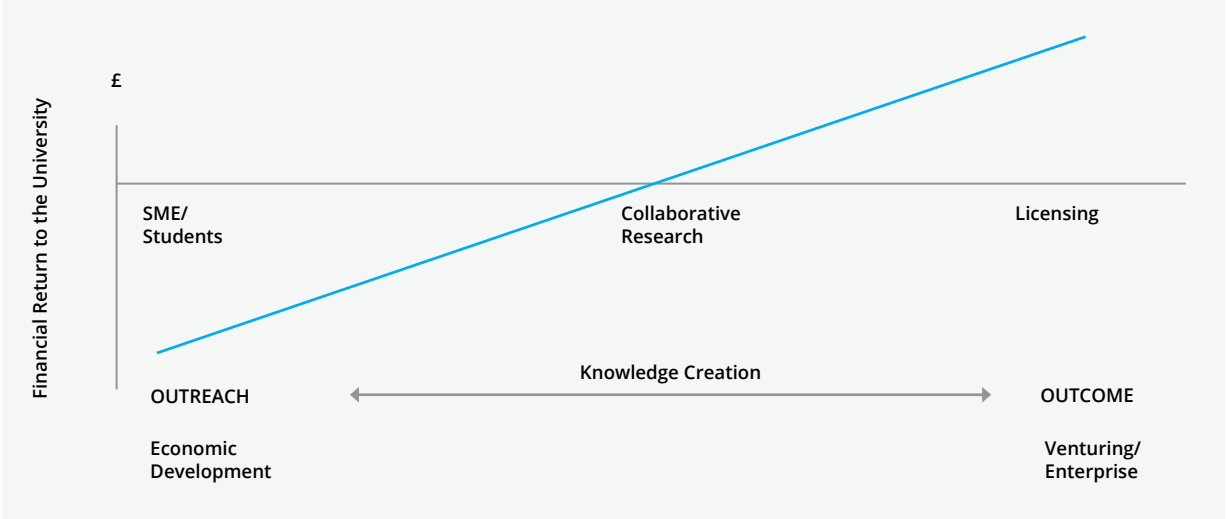

Figure 1: Variation of institutional returns with knowledge-transfer type

3 Cullen, K. 2008. Scottish universities in the marketplace. In: Engwall, L. ed. Wenner-Gren International Series, volume 84; The University in the Market. London: Portland Press Ltd, pp.89-101. [Online] Available from: www.portlandpress.com/pp/books/online/univmark/084/0089/0840089.pdf

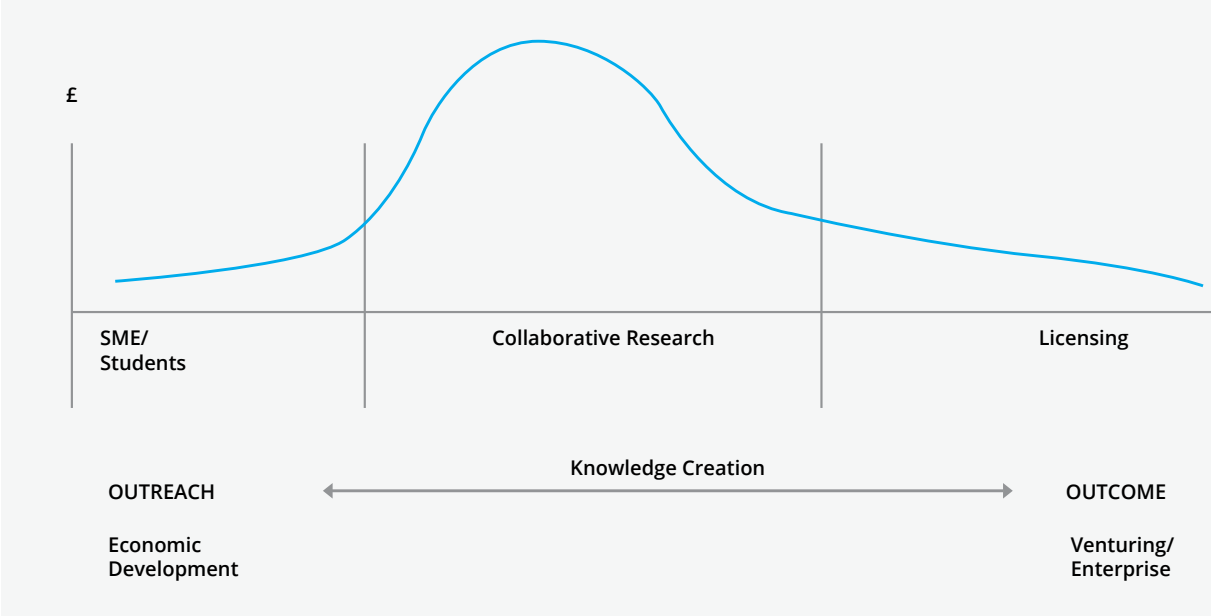

Figure 2: Variation of financial turnover with knowledge-transfer type

The horizontal axis in each case shows the spectrum of different types of Knowledge Transfer activity. This extends from outreach activities focused on economic development (for example, support for student enterprise or for local SMEs), through knowledge creation activities (for example, collaborative research), through to outcome activities that can deliver a profit (for example, licensing and spin-outs). Figure 1 shows the overall financial return to the University from these activities – a loss for outreach activity and a profit for licensing and spin-outs. Figure 2 shows that the cash-flow picture is very different, with large amounts of cash coming into the University from collaborative research, and comparatively little from enterprise support or licensing. Although the University may not make a profit from the collaborative research, it does bring in the cash needed to fund the research, which is an integral part of their mission and activity, and therefore can be more valuable to a charitable research organisation than generating profit through licensing.

The University of Glasgow formally adopted the Easy Access IP approach in 2010, and the first Easy Access IP licence followed soon afterwards for a technology arising from Professor Padgett's research group. The following year, the University of Glasgow joined with the University of Bristol and King's College London to form the Easy Access Innovation Partnership. Together, they successfully applied for funding from the IPO Fast Forward funding scheme[4] to allow the partnership to develop and promote the Easy Access IP approach.

All the founders acknowledged that the IPO Fast Forward funding gave the team the impetus of having a project with a defined focus. It also provided a budget to allow them to refine the system, document their approach, and produce supporting materials to simplify adoption by others. This included drawing up the standard legal agreements and marketing materials, and building a project website. The project also gave wider publicity to the approach, which began to attract other partners in the UK and internationally. Without this funding, Easy Access IP may never have reached beyond the confines of the University of Glasgow.

The scheme has grown steadily, with 5-6 new organisations joining each year from the UK, Australia, and elsewhere, and it continues to attract new partners. Three new partners were added to the website in November 2014, and we are aware of at least one new partner (a UK government research organisation) that is planning to join Easy Access IP early in 2015. Following Dr. Kevin Cullen's move to the University of New South Wales (UNSW) in Australia in 2011, most of the Universities in New South Wales have subsequently adopted the Easy Access IP approach.

The timeline below summarises the subsequent growth and development of the scheme (see Figure 3).

4 See http://webarchive.nationalarchives.gov.uk/20140603093549/http://www.ipo.gov.uk/fastforward.htm

Figure 3: Time line of the growth and development of the Easy Access IP scheme

There is no formal organisational structure surrounding Easy Access IP, with the University of Glasgow and UNSW generally sharing the minor administrative duties. Any new organisation which wishes to adopt the approach is asked to sign a letter of intent which commits them to supporting the aims of the project and to using the legal agreements without change (except to adapt to their national legal framework). In return, they are able to use the Easy Access IP branding and marketing materials, and standard documents.

5 Estimated date of joining the scheme.

04. Aims of Easy Access IP

As Universities exist to create and disseminate knowledge, knowledge exchange (KE) is core to the University mission. Universities use a range of different KE channels, including: Teaching, Publication, Networking/Events, Consultancy, Professional Development/Training, Placements, Collaborative Research, Contract Research, Licensing, and Company Creation.

Some of these activities are widely focused; others are directly aimed at KE between the University and business, leading to exploitation of the University's IP. Traditionally these business-facing activities have been handled by different parts of the University, with collaborative and contract research being supported by "Business Development" (BD) staff, and licensing and spin-outs handled by "Technology Transfer Officers" (TTO). Today, these boundaries are blurring in many organisations, and there are many different job titles and organisational structures. In this report, however, we will use BD and TTO activities to identify the traditional roles taken by these staff. We will also distinguish Easy Access IP licensing from "traditional" licensing activities, by which we mean the licensing of University IP in return for a fee, which may be upfront, milestones, and/or royalty based.

University-business KE exists in a changing landscape. Over the years, the emphasis has shifted from being more focused on licensing, through encouragement of spin-out formation, to today's greater emphasis on translation of research towards development, and open innovation partnerships with industry. There has also been a recognition that the benefits of University-business interactions are not measured simply in financial terms, but also with respect to the wider "Impact" that University research has on society and the economy. The UK Research Councils have adopted "Excellence with Impact" in response to the recommendations of the Warry report[6] in 2007. The UK Funding Councils have introduced the Research Excellence Framework (REF) as the new mechanism to allocate grant funding that now includes an assessment of the impact of past research funding. The results, published in December 2014[7], highlight the variety and quality of the impacts that UK research has made across the economy and society.

This emphasis on increasing the impact of University research was one of the drivers behind the development of the Easy Access IP scheme. The founding members of the Easy Access Innovation Partnership summarised their aims for the scheme[8] as:

> *"The aim of Easy Access IP is to maximise partnerships with industry and ultimately, the transfer of university knowledge for public benefit."*

On the current Easy Access IP website, this has been expanded and further refined into four aligning principles relating to maximising knowledge dissemination, creating impact, and fostering collaborative relationships by making it easier for industry to work with Universities. The mind map on the following page shows how these principles relate to one another, and lead to expected outcomes and activities.

6 Warry P. 2007. Increasing the economic impact of the research councils. [Online]. London: Research Councils UK. Available from: www.rcuk.ac.uk/RCUK-prod/assets/documents/publications/ktactionplan.pdf

7 See www.ref.ac.uk

8 See http://webarchive.nationalarchives.gov.uk/20140603093549/http://www.ipo.gov.uk/fastforward.htm

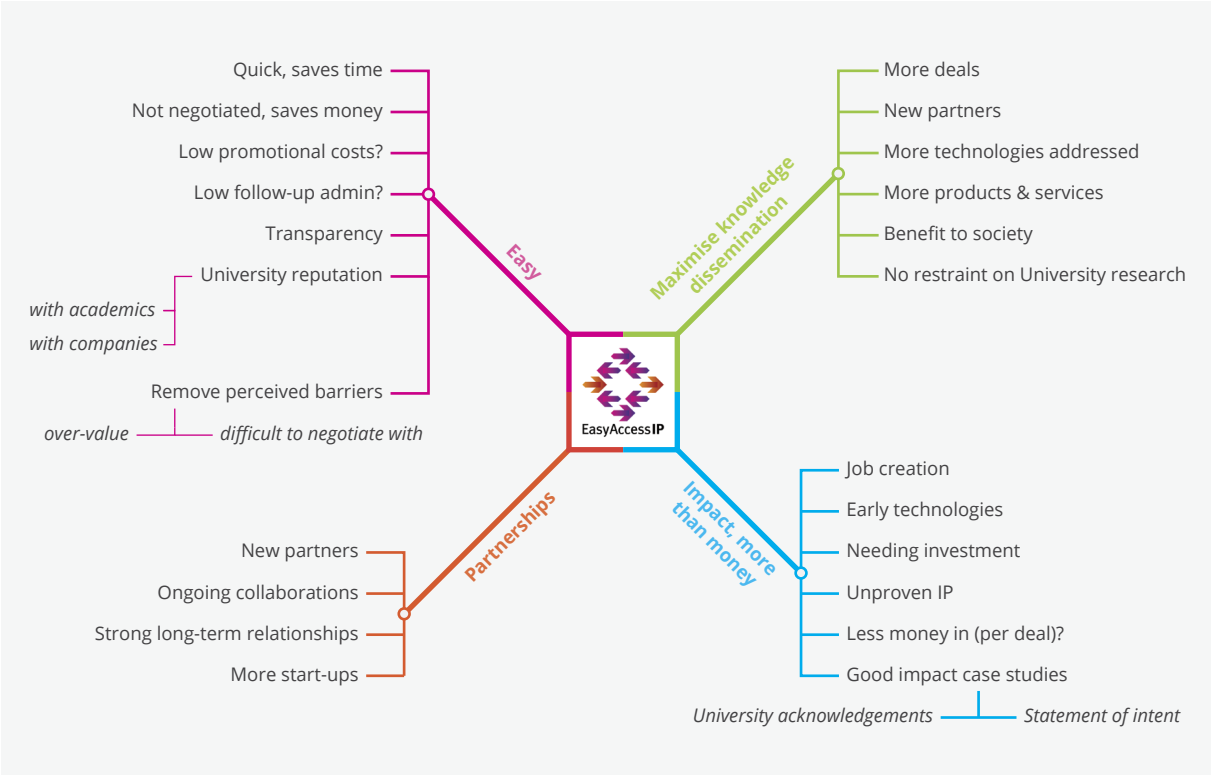

Figure 4. Mind map illustration of the aims of Easy Access IP

The Easy Access IP website[9] states:

> *"There are four fundamental, aligning principles of Easy Access IP institutions:*
>
> - *We believe that Universities exist to create and disseminate knowledge. We aim to maximise the rate of dissemination through knowledge exchange.*
> - *Our purpose is to create impact from university research outcomes as opposed to monetary aims.*
> - *We want simple transactions and agreements which make it easier for industry to work with us.*
> - *The Easy Access IP agreement is the beginning of a collaborative relationship, not the end of a knowledge exchange process."*

The mind map illustrates how these translate into two different types of aim for the scheme. The first concerns making the University easy to approach and do business with, and the second relates to increasing interaction and the impact from their research.

> *"Universities DO NOT commercialise technologies; companies and industry partners DO"*

9 http://easyaccessip.com

It is also important to note that, despite some of the early publicity surrounding the scheme, Easy Access IP is NOT about giving free and unfettered access of all University research to anyone that wants it. Commercial success generally requires that a company attains a commercial edge through their access to the IP. The majority of Easy Access IP technologies are therefore exclusively licenced to a single entity. Although the deal is free in monetary terms (no upfront fees, and no royalty payments, ever), it does nevertheless require certain commitments from the licensee, who must:

- demonstrate how they will create value for society and the economy (via a Statement of Intent);
- acknowledge the licensing institution as the originator of the intellectual property;
- report annually on progress with the development of the Easy Access IP;
- agree that if the IP is not exploited within three years, the licence will be revoked;
- agree that there will be no limitations on the licensees use of the IP for the university's own research.

The licensee can request assignment of the IP after three years. In deciding whether to agree to this request, the University will assess the performance of the licensee against their Statement of Intent.

There are a number of different types of opportunity which are expected to fit into the Easy Access IP scheme. Typically this is an opportunity which:

- is difficult to commercialise through traditional routes;
  - » *either because it is at too early a stage in its development*
  - » *or because it presents too many uncertainties for companies to risk an investment*
- that will have more impact on the economy and society through the Easy Access IP Portfolio;
- requires significant investment to release its inherent value, which may not be available internally.

4.1 The Easy Access IP Licence

The Easy Access IP licence is a simple, one page licence, with 10 clauses. Each partner organisation has their own version, adapted for their specific location and organisational structure, but they are not able to alter these terms. Different versions exist, for example for exclusive or for non-exclusive licences. A full sample licence is given in Appendix 2; the key provisions of each of the agreement clauses are:

1.	Grant of rights: licensee may exploit in any way deemed appropriate
2.	University retains teaching and research rights
3.	Acknowledgement of University contribution
4.	Reasonable efforts to use (in accordance with Statement of Intent in schedule 2)
5.	Annual report on use and economic benefit for first 3 years, and later on request
6.	University termination right if IP is not used in accordance with Statement of Intent within 3 years
7.	Costs of any IP protection to be agreed between the parties, no obligation on University to prosecute or maintain
8.	No warranty from the University on the technology (including infringement)
9.	No University liability to the licensee
10.	Applicable law

The form of this licence already begins to achieve some of the aims of Easy Access IP:

- Ensures research rights are retained for the University.
- Gives companies what they need without protracted negotiation.
- Makes the transaction simple and easy to understand.
- Creates the link to Impact (unlike publishing for example).
- Builds a positive relationship (as it avoids protracted negotiation and disagreement over warranties and liability, IP ownership clauses or other deal details).

05. Use of the Scheme

5.1 Evidence Base

To examine the extent that the Easy Access IP approach is being used within the partner organisations and the types of deal which have been done, we contacted all of the founders of the Easy Access Innovation Partnership and the 24 participating institutes (as at January 2015), and requested an interview to discuss their use of the scheme. We received an excellent response rate, and in all collected usage data from 18 organisations (75%), and carried out 19 full semi-structured interviews with 23 representatives from 16 partner organisations. For the remaining 8 organisations, we collected more limited data through email correspondence, brief telephone calls and from public sources.

	UK	Australia	Rest of World	Total
Scheme partners (no. of organisations)	10	6	8	24
Responses (no. of organisations)	10	4	5	19
Interviews (no. of organisations)	9	4	3	16
Interviews (no. of individuals)	11	8	4	23

Table 1: Easy Access Innovation Partnership participation

Where possible, we have collected both quantitative and qualitative data through these interviews about the number and types of deals that have been completed, and about perceptions and attitudes to the scheme. We have also supplemented the interviews with secondary data from the published literature, and from web searches.

The partner organisations are a diverse group, with annual research budgets (where given) ranging from Aus$ 40 million (~£22 million) to Euro 1 billion (~£760 million). For most, however, their research budget falls into the range £50m-£150m. The number of disclosures that are processed per year is also wide ranging, from a low of 9 to a high of 186, with an average of 66 and a median of 55 disclosures received per office per year. The size of the technology transfer offices is generally small, typically between 2 to 5 people, although the largest office has 15 staff. The average size of the technology transfer office is 4 (excluding the largest outlier).

5.2 Number of Technologies Offered and Marketing Routes

We investigated publicly available information about the technologies which are currently on offer through the Easy Access IP scheme, and compared this with the information reported through the interviews. The Easy Access IP partners have a range of ways in which they can promote their technologies and membership of the scheme. All the partners are listed on the Easy Access IP website, and many also mention their

involvement with the scheme on their own web pages. They may also list the technologies that they currently have for offer on their own websites. As outlined in the History above, one of the resources available to partners is the iBridge network[10], which is a US-based technology transfer portal, where details of the technologies in the scheme can be listed, and tagged as part of the Easy Access community[11]. The Easy Access IP website also links to this site. Some of the partners are listing their technologies here, whilst others have reported some problems with use of the site, or find alternative listings to be more useful.The Venn diagram below shows the overlap between these different forms of advertising. Six organisations are listed on the Easy Access IP website, but do not (yet) have any other public mention of their involvement. Four more mention Easy Access IP on their own website, but do not list their technologies for offer. Eight have technology listings on their own and/or related websites, whilst five also use iBridge as well as these outlets. One organisation has listed technologies on iBridge, but do not mention it on their own website.

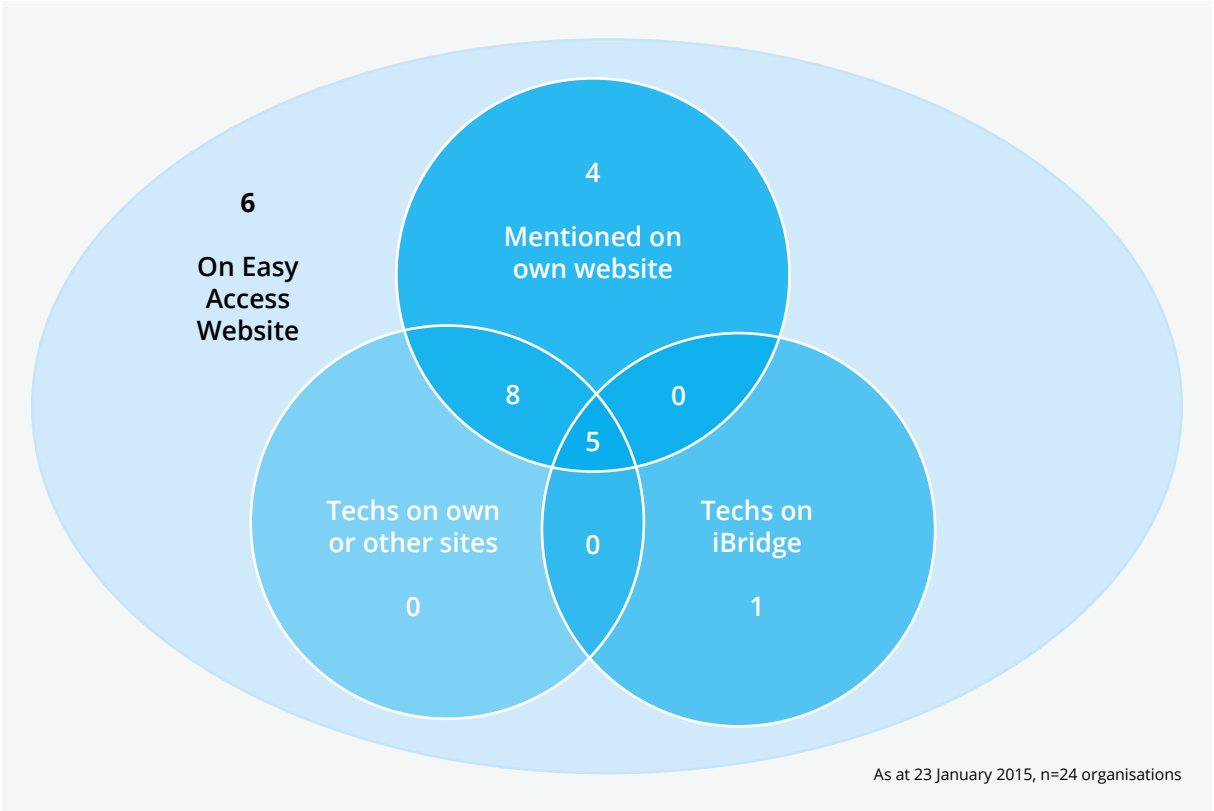

Figure 5: Overlap between advertising routes used by the Easy Access IP partners

Of the five partners which did not respond at all to our requests for information, two only joined in the past year, and to date are only mentioned on the Easy Access website. One mentions Easy Access IP on their website, but has not listed any technologies, one has technologies listed on a website associated with the University, and one also has technologies on iBridge.

We searched on iBridge and all the organisation websites to identify the technologies which are listed. The complete list of technologies which were identified by these searches as being currently on offer through the Easy Access IP scheme is given in Appendix 3. The number of technologies offered by each organisation is shown in the following graph, and related to the number of different ways in which they advertise their association with the scheme (mentioned on their website / technologies listed on iBridge / technologies listed elsewhere). The organisations are listed in the order in which they joined the scheme. There is a rough correlation between length of engagement, level of advertising, and number of technologies on offer, but this is not a firm relationship.

10 See www.ibridgenetwork.org

11 See www.ibridgenetwork.org/community/Easyaccessip

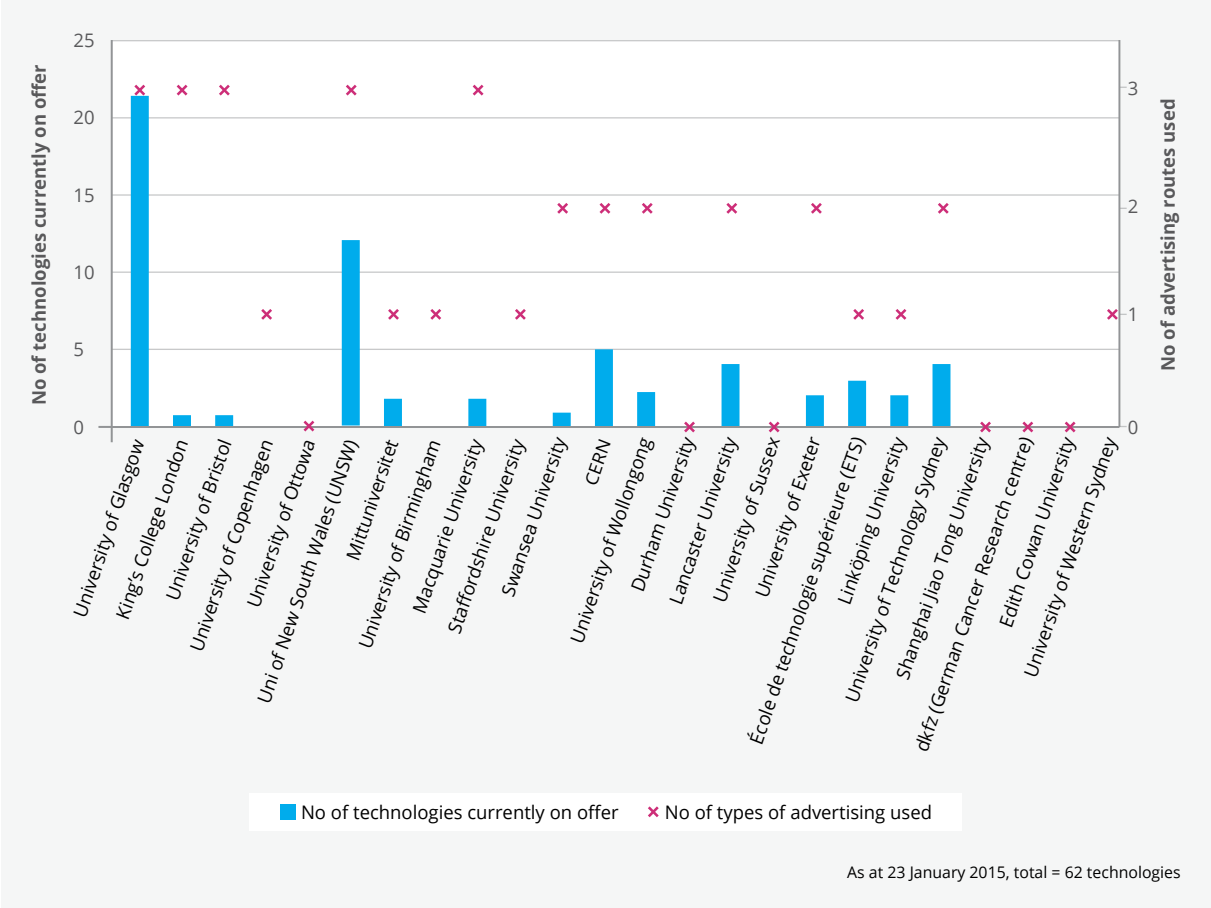

Figure 6: Correlation between the number of technologies used and the number of advertising routes used

We identified some inconsistencies between the technologies on iBridge and those on the University or other websites. From the interviews, we identified that this data is not always well monitored internally, so there was some uncertainty about the number of technologies that an individual organisation had offered through the scheme. Maintaining this type of external technology listing is often low on the priority list of a busy technology transfer office, and some reported that it was a minor route to uptake of their Easy Access IP technologies. Other routes to uptake include direct marketing to potential licensees, deals with existing partners, or with University academics or students, or as the foundation for a new industry-sponsored research collaboration.

This means that many Easy Access IP deals are for technologies that are never listed on these external websites. We collected data from the interviewees on the number of technologies that have been offered over their years of involvement. This amounted to approximately 200 technologies from the 12 organisations which provided this data.

> *"Active promotion of Easy Access opportunities still requires the same level of resource as other traditional commercialisation methods."*

Twelve of the interview respondents stressed that the efforts used to identify, target and market to prospective partners are the same for Easy Access IP as they are for any other opportunity. One comment we received was that Easy Access is not a "magic label" that can be put onto a technology that will automatically attract interest. Others may have already used direct marketing for the technology with the aim of completing a traditional licence but failed to find a partner. In these cases, the move to Easy Access may be a reason to re-engage with prior contacts, a flag that attracts wider interest, or the addition of another marketing route through the iBridge or other networks.

Membership of the Easy Access IP partnership was mentioned by twelve of the interviewees as a positive marketing tool, both internally and externally. The approach is attractive to certain academics with a less commercial focus, and some participants reported that this had allowed them to interact with a wider group of academics than previously. The brand has achieved external recognition within the research community and, to a lesser extent, in the wider business arena. The concept of Easy Access IP is simple to explain to potential industry partners, and the principles that it encompasses fit well with the ethos of a number of institutions which are more interested in Impact and application of their research than financial gain. The fact that the agreements and approach are ready to go, easy to adopt and have been validated by use in a range of other organisations is also attractive. This has also been found in reviews of the use of other standard agreements, such as the Lambert Toolkit for collaborative research between Universities and Business[12].

- The Easy Access IP brand is a valuable marketing tool both to academics and to potential industry partners.
- The scheme is simple to adopt, and the validation of other users adds weight to the suitability of the agreements and approach.
- Promotion of Easy Access IP opportunities needs the same level of resource as for other commercialisation methods.
- Not all Easy Access IP technologies are advertised externally.
- Approximately 200 technologies have been made available through the scheme, and there are currently 62 technologies from 14 organisations listed on public websites.

5.3 Number of Deals Done

A total of 68 Easy Access IP licence deals were reported by 18 organisations in this survey. Two further deals were reported to be in progress, and expected to complete in early 2015. These organisations have been partners in the scheme for different lengths of time, and this represents approximately 1.8 deals per organisation for each year that they have been a partner in the scheme. To put this in context, 14 of the same organisations also provided data on the number of other licensing deals (not using the Easy Access IP agreement) which they have completed over the same time periods. A total of 677 non-Easy Access deals were reported, or just over 23 deals per organisation during each year that they have been a partner in the Easy Access IP scheme.

The contribution of the UK Universities to these figures is 29 Easy Access IP deals reported by 10 organisations, or just over 1 deal per organisation for each year that they have been a partner in the scheme.

Previous internal reports by the Easy Access Innovation Partnership have reported the number of deals done as 18 up to September 2012, 25 by May 2013, and 31 by October 2013, indicating a fairly steady growth in deal numbers over the life of the scheme.

12 Eggington, E. et al. 2013. Collaborative Research between Business and Universities: The Lambert Toolkit 8 Years On. [Online]. Newport: The Intellectual Property Office. Available from: www.gov.uk/government/publications/the-lambert-toolkit-8-years-on

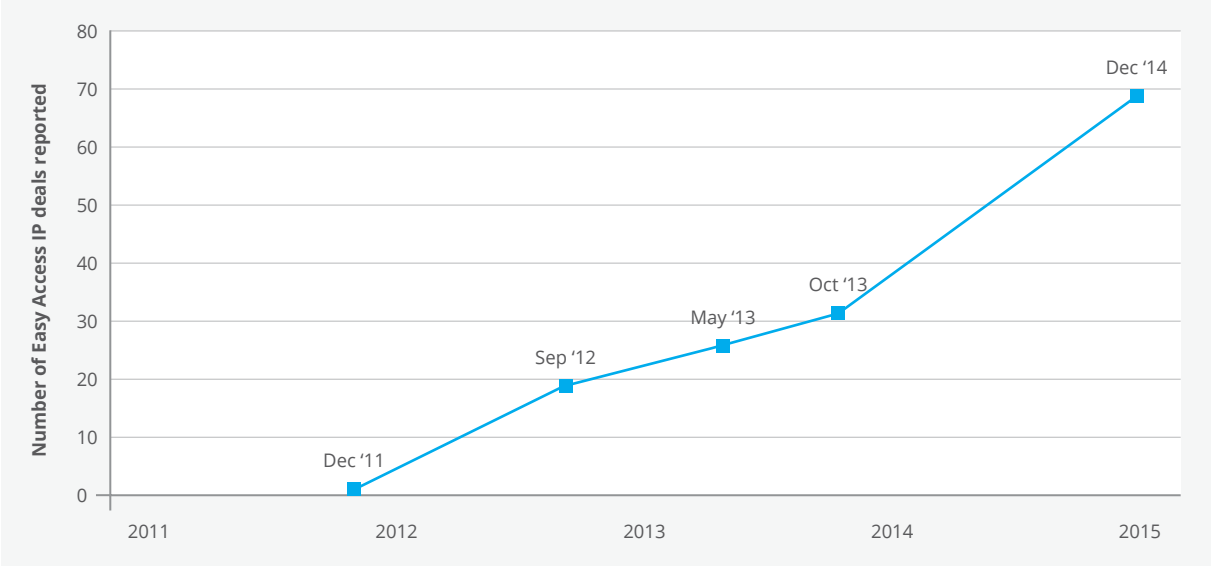

Figure 7: Easy Access IP deals completed over the lifetime of the scheme

When we look at the number of deals done by each organisation, it can be seen that the data are highly skewed. Two organisations between them have carried out about 66% of the reported Easy Access deals, whilst at the other end of the scale, two-thirds of the reporting organisations (half of the partnership) have completed an Easy Access IP deal only once or not at all. Two of those reporting no deals to date have only just joined the scheme in November 2014, so would not be expected to have completed any deals yet.

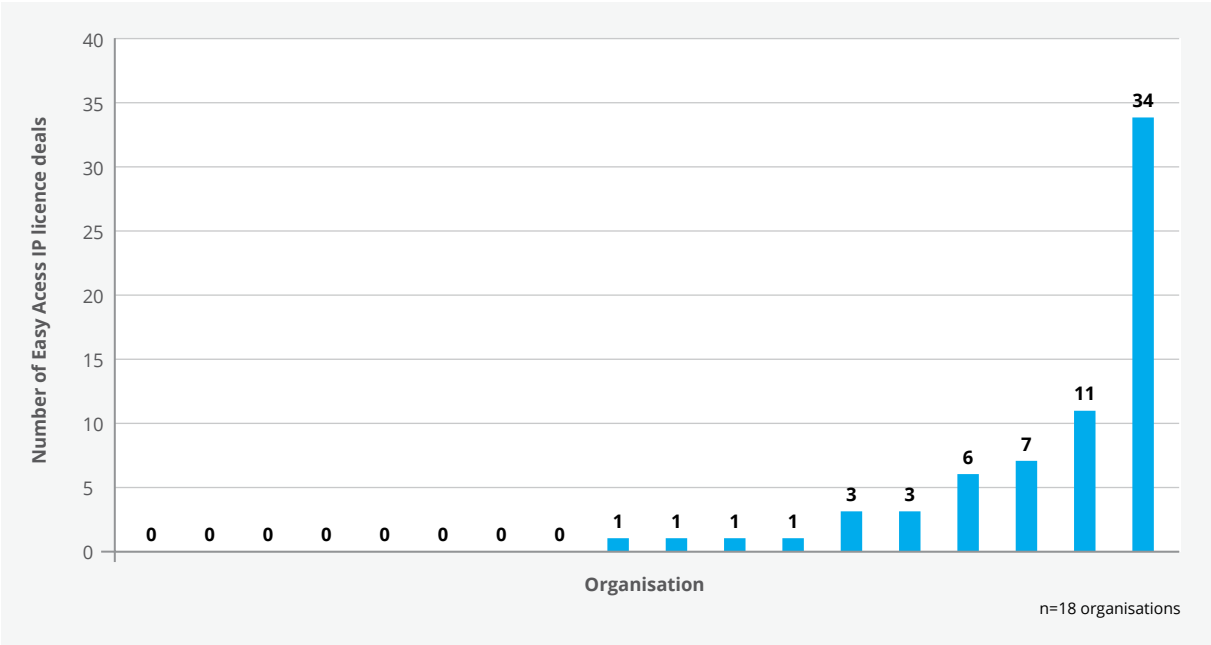

Figure 8: Number of Easy Access IP deals completed by each organisation

The two most active Universities are the University of New South Wales (UNSW) and the University of Glasgow, which are the current and previous workplaces of Kevin Cullen, the driving force behind the original concept for the Easy Access IP scheme. This suggests that strong leadership and an internal champion may be important to drive full exploitation of the approach. UNSW is also the only organisation which reported that it did more Easy Access IP deals than "traditional" licences – in their case, 63% of the portfolio has been licensed via the Easy Access approach since its introduction. For UNSW, Easy Access IP is seen as a core activity, with a strategic commitment through the TTO to using this as their default approach. The University believes that this approach results in the higher Easy Access deal activity which they have achieved compared with the other Easy Access IP partners.

For 10 of the 68 reported Easy Access IP deals, we have been able to locate a press release or other publicity about the relationship. Brief details and links to the announcements of these deals are given in Appendix 4. In the interviews, some respondents reported that they were not yet following up very closely with the commercialisation activities of their licensees.

For the organisations which have yet to complete a deal, a range of different reasons were given for why this may be the case:

- Only just joined the scheme, still preparing (2 organisations).
- Yet to put any technologies in the scheme (1 organisation).
- Has been more focus on spinout activities (1 organisation).
- No interest from companies in the technologies on offer, not adding new ones at present (4 organisations).

The licence deals reported in the graph above relate to initial licensing deals. Some of these licences have since been assigned, and a small number have been terminated. In the cases where we were able to identify the reason for these terminations, they were terminated in order to be replaced by a more comprehensive alternative legal agreement, rather than representing a failure of the relationship or the commercialisation activities. No organisations reported that they had terminated the agreement and taken back the IP rights after licensing them through Easy Access IP.

In addition to the deals discussed above, both UNSW and the University of Glasgow have also adapted the Easy Access licensing terms to form the basis for the treatment of IP which arises from certain of their research collaborations, through "Easy Access Research". This will be discussed in more detail in section 5.6, and the numbers of additional deals reported using this approach were 7 deals for UNSW and 33 deals for the University of Glasgow.

- A total of 68 Easy Access IP licence deals were reported by 18 organisations in this survey; this number is small compared with the number of traditional licences agreed in the same time period.
- Two organisations between them have carried out about 66% of the reported Easy Access deals; the two most active Universities are UNSW and the University of Glasgow.
- Two-thirds of the reporting organisations have completed an Easy Access IP deal only once or not at all.
- Where organisations have not completed any deals, this is generally because they have not yet engaged with the scheme, or have not received any interest from companies in the technologies on offer.

5.4 Types of Deal

We gathered as much information as possible about the deals that have been completed, but the interviewees did not always provide complete data for all the deals. In the analysis which follows, the number of deals which provided the relevant information is highlighted in each case.

Technology Areas

The technology areas involved in the deals spans the full range of subjects, including both science-based and the humanities.

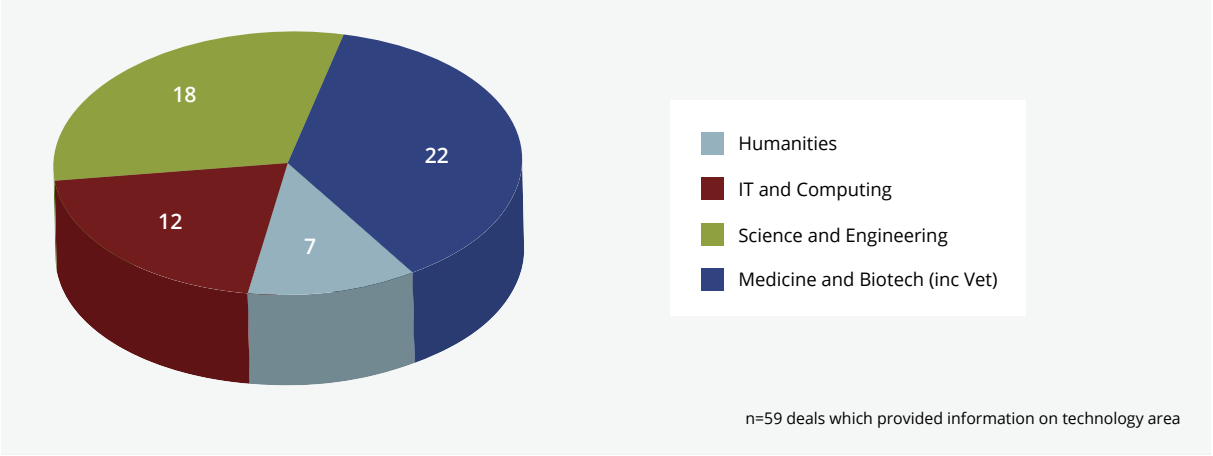

Figure 9: Number of deals for each technology area

This was reflected during the interviews, with 5 respondents saying that it was suitable for all types of technology and two suggesting that it worked well for humanities or social enterprise. Three participants felt that the only area that is less suited to Easy Access IP is drug development, where the economics and risk-reward profile of the development pathway require a more traditional approach.

Type of Intellectual Property

The licences reported covered all types of tangible and intangible intellectual property. Patents were the most common, but there was a good spread across all different IP types. In most cases, only one type of IP was licensed, but for 9 of the 49 deals providing this information, two different types of IP were covered, and in one case three types were included.

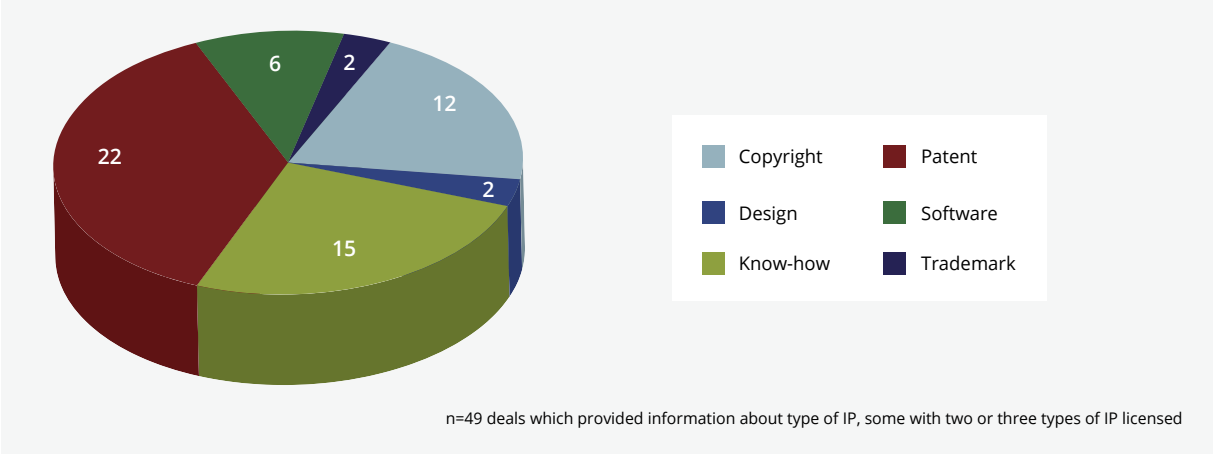

Figure 10: Types of IP licensed

The interview respondents reported that it would be rare for a patent to be taken beyond the provisional stage for a technology that is going down the Easy Access IP route. However, some organisations would file a provisional patent for an Easy Access technology, as this stage is relatively cheap and preserves value for the potential partner. Others would be unlikely to spend money on patenting unless they already had some partner interest, or had originally tried to license the technology through a more traditional route. The relatively high proportion of technologies with an associated patent in the graph above reflects both this mixture of routes for technologies into the Easy Access scheme, and the value that the partners receive from patent protection where appropriate. Technologies with lapsed patents may still remain in the Easy Access portfolio, as the associated know-how, resources, and expertise can still have value.

All different types of both tangible and intangible IP were reported during the interviews as being suited to the Easy Access approach. Two organisations use all types of IP, 8 use patents and 7 use other softer types

of IP, such as know-how, software, etc. Three organisations would be unlikely to license know-how alone, but would include it as part of an IP package.

As might be expected, the use of patents is most heavily associated with medtech opportunites, and also with science and engineering, whilst the humanities opportunities use softer protection, such as trademarks and copyright. IT and computing opportunities rely heavily on software and associated copyright protection. This reflects a similar type of pattern as would be expected for traditional licensing activities.

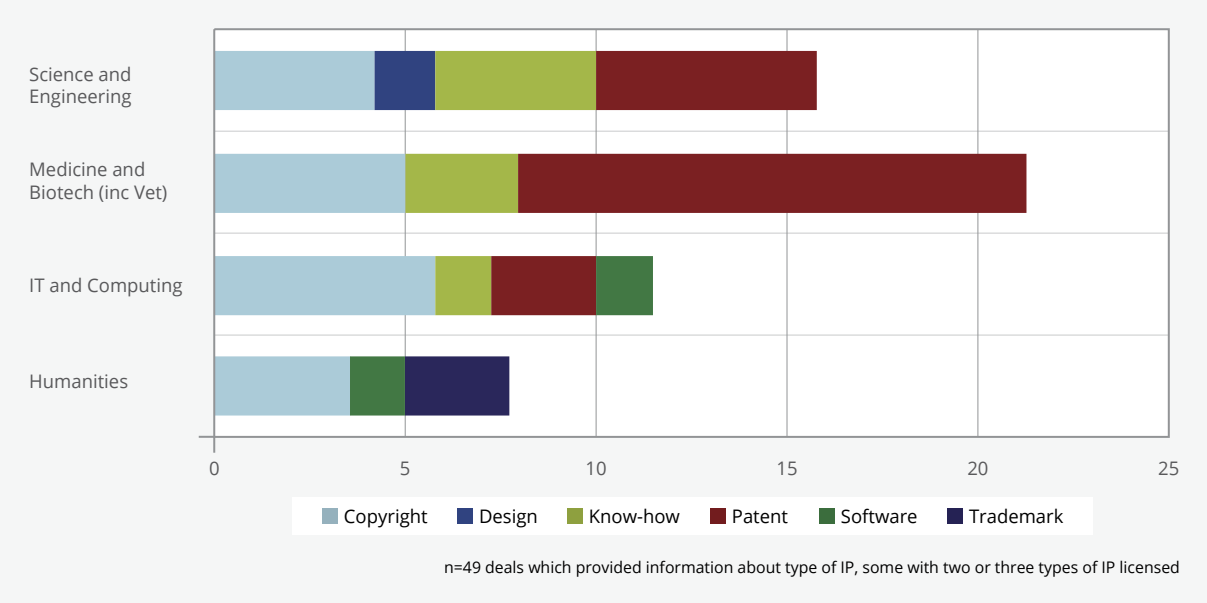

Figure 11: Types of IP licensed by technology area

Stage of Development

Information about the stage of development was only provided for 15 of the deals, so it is not possible to draw any firm conclusions. These technologies ranged from concept only (3 technologies), through having some proof of concept data available (6 technologies), to being well developed and near to commercialisation (6 technologies).

This was unexpected, as it is in contrast to the original aims of the scheme to encourage the exploitation of technologies which needed significant further development. This was also the attitude reported in the interviews, where eight respondents said that it worked best for early stage technologies, especially if significant development costs are anticipated and are unlikely to be found from within the University. Only one respondent said that the scheme is suitable for all stages of technology development. The fact that it has been used at multiple stages in this limited data set demonstrates the flexibility of the framework to adapt to different circumstances from those that were originally envisioned.

Licensees

Very few of the licensee companies were large or multinational corporations, with the vast majority of deals being with micro or SME companies. There were also some deals with social enterprises. The interviewees (8 organisations) also reported that the approach fits better with SMEs and other less sophisticated licensees, where the simplicity of the agreement is very helpful. In contrast, large companies tend to prefer to use their own agreements, even if these may use the same terms (free access, in return for reporting obligations and research use).

In the categorisation below, “charity” has been used to include related organisations, such as social enterprises, not-for-profit, non-commercial, educational or non-governmental organisations. In some cases, the data about the size of the company was provided by the interviewee, in others it was inferred from public information about the licensee company.

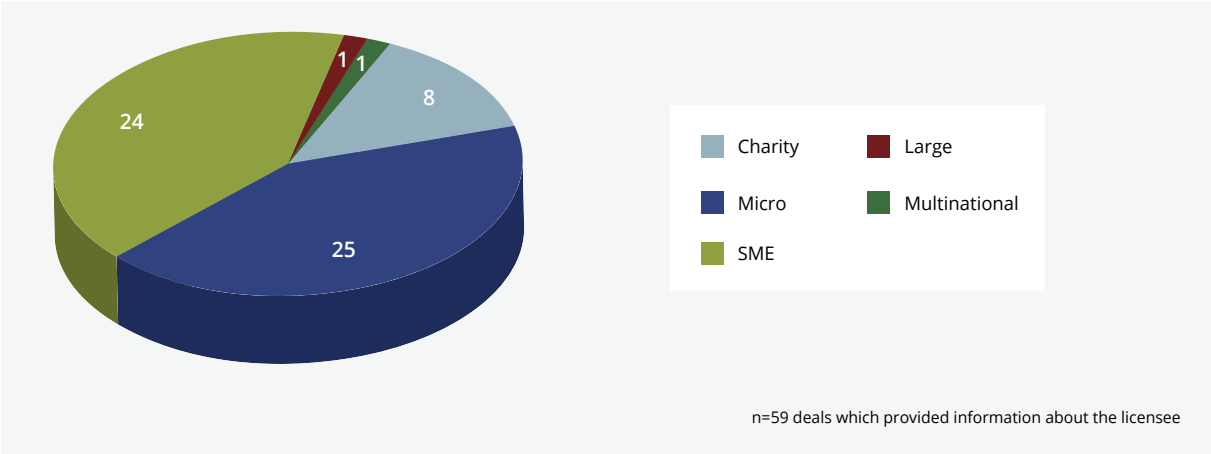

Figure 12: Size of licensee companies

In the vast majority of cases, the licensing deal was done with an organisation which was based in the same city as the University, although in a few of these cases this was the local office of a multi-national company. A smaller number of deals were done with other national organisations, and with overseas companies. This supports the idea that Easy Access IP deals are more likely to benefit companies within the same country than to result in the value of a home-supported technology being realised by a foreign organisation. As before, the data about the location of the company was provided by the interviewee, or inferred from public information about the licensee company.

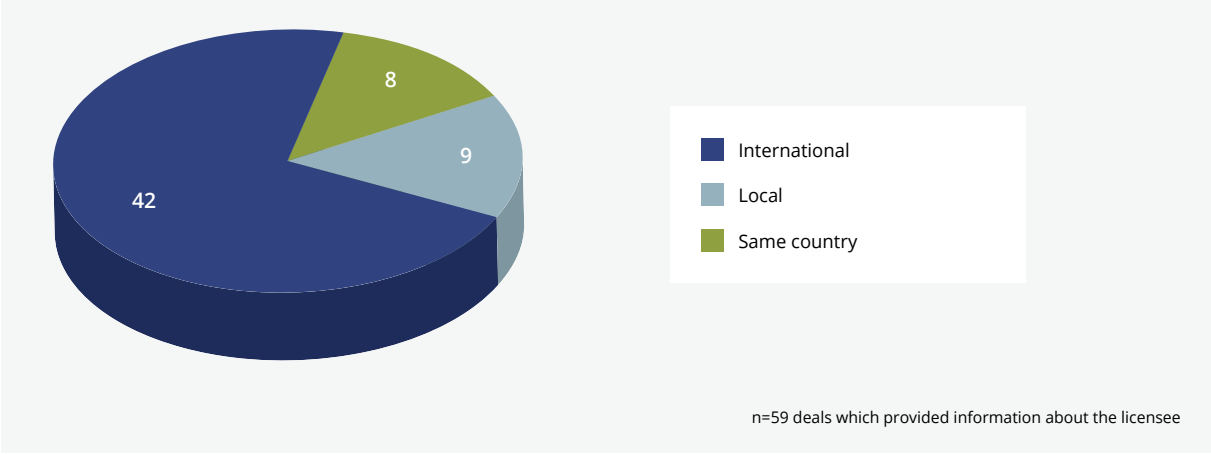

Figure 13: Location of licensee

This concentration of interactions onto small, locally based companies is likely to reflect a combination of the types of technology deals that best suit the scheme, and the types of organisation that have adopted Easy Access IP to date. At least two of the partners have specifically included Easy Access IP licensing as part of their outreach activities to support local SMEs.

We also looked at whether these companies were already known to the University before the deal was done, or if they were new partners that had been drawn in by the Easy Access IP scheme. The data for this question are not complete, and where the answer was left blank, it was not clear if this meant “no – the company was not known to the University before”, or that the information was not available. A number of the deals were to a licensee that was associated with the University (for example, if the licence was to a company founded by an academic), and these were also put into the category of partners which were known to the University. Of the 38 deals where information was available, 27 licensees were known to the University before the deal, whilst 11 were new partners. This supports earlier research, where 16 of the first 18 Easy Access IP deals signed were completed with partners which were already known to the organisation in question.

The main characteristics of the types of deal that were reported include:

- Range of technology subject areas, including humanities and Science, Technology, Engineering and mathematics (STEM).
- Mixture of tangible IP (inc. patents) and know-how.
- Range of technology readiness levels, but may be particularly suited to very early stage research? (Tentative).
- Most licensees are micro companies or SMEs.
- Most licensees are geographically close to the partner University.
- The majority of licensees are already known to the University.

5.5 Benefits

A number of partners reported that the impetus to bring in Easy Access IP was part of a wider shake-up of how the University approached industry interactions, and rethinking the role of the technology transfer function in supporting this. This may have been prompted by incoming senior management or Research and Innovation/Technology Transfer (TT) management, or by changes in commercialisation partnerships. The introduction of Easy Access IP was intended to deliver a number of advantages for the new system.

When asked about the benefits of Easy Access IP to their organisation, the most common response from the interviews was that it was a useful addition to the range of KE mechanisms available to them (11 organisations). Only UNSW employs Easy Access IP as their default means of engagement, reserving traditional approaches for the opportunities with the highest potential commercial value. For the other partners, there are specific circumstances in which they find Easy Access IP to be helpful, and these will be discussed further in Section 5.6.

Another common benefit (10 organisations) was that the non-negotiable one-page agreement significantly reduces the staff time and legal costs of the transaction stage of putting the agreement in place. As discussed in section 5.2, the Universities report that they still have to put the same time and effort into marketing the Easy Access IP technologies, finding a partner, and agreeing a deal. From this point on, however, the process is very quick, simple and easy. This implies that the scheme delivers more in terms of time and cost savings to the company partners than the Universities, and this can be a valuable advantage for them. The University of Glasgow cited one deal in which technology was licensed to Boulder Non-Linear Systems where the deal was completed with 8 weeks from initial discussions, and a product launched within 6 months with immediate sales. In certain circumstances, the simplicity of the agreement may be a disadvantage, however, for example where more sophisticated liability or confidentiality arrangements are needed. In these cases, a more complex legal agreement may be used, but still using the same principles of free access in return for certain obligations on use and acknowledgement.

The obligation placed on the licensee to report back to the University on progress, and to acknowledge their input was also important to 9 organisations. Compared with previous practice, when IP may have been released to a partner for free without these obligations, this allows the institutions to capture the impact of their research. Many organisations now have key performance indicators linked to impact achievements, and this approach fits well with this ethos. Impact is also increasingly important to the academics, as it is used to assess research quality and allocate funding. One organisation commented that the availability of Easy Access IP as an alternative is a useful reminder that financial benefit is not always possible, and is not the only route to exploitation. In many cases, it is more important for the research to be adopted and used in practice than to obtain a financial return.

Interestingly, although this link to impact outputs was seen as important, a number of the interviewees either reported that they did not follow up with their licensees very rigorously, or did not have data available about the current status of the technologies that they have licensed. Reasons given for this discrepancy included that they were still putting the procedures in place, or that it was still too soon for the technologies to have developed to the stage of delivering Impact. If the scheme is to demonstrate that it can deliver on its aim of increased Impact, then it will become increasingly important for the partners to track and report the Impacts that they have achieved.

> *"As members of Easy Access IP, the University is saying to potential partners: 'we are open, flexible and innovative'"*

One of the original aims of the scheme, that of removing perceived barriers, was also often cited (8 organisations) as important. In particular the notions that Universities are difficult to deal with, are bureaucratic, and tend to overvalue their intellectual property. By putting an opportunity into Easy Access IP, the initial conversations with a potential partner are easier and friendlier. It also sends out a positive message that the organisation wishes to be open and flexible in its relationships with potential partners.

The final benefit that was reported was that it enabled more disclosures to be addressed (8 organisations), particularly for offices with significant resource constraints. This then enabled these offices to interact with a wider group of academics than they had done previously. Easy Access IP gives these organisations an outlet for less valuable opportunities or for non-traditional technology transfer opportunities. This also allows the offices to focus more attention onto the higher value traditional licences.

The Easy Access IP partners include the academic originators of the technology in the decision making process for whether to include a particular opportunity in the scheme; no academic is forced to participate if they do not wish to. Several organisations reported that most of their academics like the approach, as it is aligned with their interests in impact and in bringing in collaborative research funding. Some have requested that all their IP is treated as Easy Access IP. As with traditional licensing, the support of the academic is very important in reaching a successful deal, and potential partners are often introduced from the academic's own network. Occasionally, some of the more commercially oriented academics do not like the approach; this is particularly true in Sweden, where they operate a "Professor's Privilege" system in which any IP belongs to the academic rather than to their University employer.

The overall value of the scheme to its partners is demonstrated in that ALL the participants that we spoke to intend to remain active partners in Easy Access IP.

All the participants intend to remain active partners in Easy Access IP. The major benefits that they reported include:

- Adds a useful alternative to the range of KT mechanisms available, with specific niche applications.
- Reduces staff time and legal costs of the TRANSACTION stage (but not the earlier marketing stage). This means it saves more time and money for the company partners than the University partners.
- Aligns with the Impact agenda, and ensures this is captured and reported back, although reporting is not always consistent.
- Sends a positive message, removing the perceived barriers for industry.
- Enables more disclosures to be addressed, especially for resource-constrained TTOs, allowing interaction with a wider group of academics.

5.6 Evolution and Diversification

The original aims for Easy Access IP related to doing more deals by removing some of the perceived barriers which were stopping industry from engaging with University research. As the scheme has become more widely used, and its particular benefits identified, this has evolved and now appears to be more concerned with using University IP to leverage a wider range of interactions with industry. This is also reflected in the way that different organisations have found different ways to use the scheme which fit with their particular needs.

> *"It [Easy Access IP] is not the only way, but part of a portfolio of KE tools to maximise Impact"*

Six organisations reported that they have successfully used Easy Access IP opportunities as a "hook" to leverage wider discussions with industry about research collaboration or other interactions. It was not possible to gather definitive evidence to quantify how much influence this has had. However, there were some anecdotal examples:

- One University approached a company to offer them a technology under Easy Access IP. The company had no interest in this technology, but after speaking to the researchers has funded an Aus$ 50k research project, which has now led onto a Linkage Grant with an option to licence the resulting IP.
- Another company was approached with an Easy Access IP technology, which developed into a large-scale research project with an option to licence the Easy Access technology.
- A University was approached by a company with an interest in an advertised Easy Access technology. On further investigation, this didn't meet their needs but has led instead to completion of a traditional licensing deal for a more suitable solution.
- One Easy Access IP deal has led to a rich relationship with the company, including two-way exchanges, collaborative research, insight into research problems and early product development.

However, four other organisations reported that they had not been successful in leveraging this type of interaction.

Following on from Easy Access IP, the University of Glasgow and UNSW are now implementing "Easy Access Research". This is an initiative under which companies, which fund or sponsor research at the University, will be offered a licence to any IP which results from the work under easy Easy Access terms (i.e. no additional milestone or revenue payments, in return for research rights for the University, reporting on impact activities and acknowledgement of the role of the University). Any IP generated by the research is still owned by the University, but all rights are granted to the company under this arrangement. A similar approach has been used by another of the partners in their industry-sponsored PhD programme. This type of arrangement can be particularly useful for problem-solving research, where the output is an incremental improvement which may be difficult to patent, but which nevertheless has value to the sponsoring organisation. By tying in an industrial partner, it also opens up additional funding options for the research, for example through InnovateUK. This approach is not new, and some of the other respondents reported that they have always included similar provisions in their research agreements where appropriate, but do not label it as "Easy Access". Non-partner organisations will also do the same in specific circumstances, although they may be less likely to link this to the obligations of the Easy Access IP scheme.

The analysis of the types of deals done suggested that it is particularly suitable for SMEs and other less sophisticated partners which appreciate the simple process and paperwork. Two of the partners have recognised this suitability and formally incorporated Easy Access IP as part of their outreach activities to support local SMEs. For these SMEs, it is a much easier way to access innovation than searching through the published literature. The structure of the licence also gives them unfettered access to the IP which is important when obtaining funding. The lack of upfront fees in particular also limits the downside risks of taking on the development of the technology.

The final category of activity is to facilitate the easy transfer of IP to less traditional recipients, for example to enable social enterprise (3 organisations), or for student enterprise projects (2 organisations), or as an easy mechanism to return IP to the inventor and facilitate staff start-ups (5 organisations). In all these cases, it is a quick and simple mechanism to allow the IP to be used with minimal effort required from the University.

University of Technology, Sydney (UTS) reported a social enterprise relationship in which they gave a wheelchair company free access to technology developed by UTS robotics researchers. The technology was a step-climbing attachment for two-wheel drive powered wheelchairs, enabling users to navigate kerbs and single steps without needing to buy a whole new wheelchair. Once the company controlled the IP, it was able to obtain funding to develop the system, and this has led to further research work for the University.

Different organisations have adapted the Easy Access IP framework to meet their own specific niche requirements:

- Hook to lead into discussions about research collaboration or other interactions.
- Means to aid agreement on research partnerships (Easy Access Research) and outlet for incremental improvements.
- For local SME engagement.
- Simple way to enable social enterprise transfers.
- Facilitator for student enterprise.
- Easy mechanism to return IP to the inventor and facilitate start-ups.

5.7 Pitfalls

The interviews also identified some common pitfalls which can be associated with Easy Access IP.

The method of implementation of the scheme was said to be important to achieve the greatest success. Eleven organisations had support from senior management and/or the commitment of an internal champion during implementation. Several commented that without this, the scheme would not have been brought in. This viewpoint is also supported by the seven institutions which do not have strong management support or a specific champion with responsibility for the scheme. Five of these institutions have done no deals at all, and one has done only one deal. The role of the champion is highlighted by the two most active partners, which are both associated with the originator of the scheme.

Closely related to this is the need to align the performance indicators of those responsible for implementation with the goals of Easy Access IP. Unless the approach is embedded in the TTO culture, it will not be so successful. Eight organisations raised this as an issue, with one putting this as the main reason for their low level of use of the scheme, and another stressing that it is essential for the success of the scheme for Easy Access IP to be core to the TTO approach. The organisations which have found Easy Access IP easiest to incorporate are those where responsibility is given to the BD team, or where the TTO and BD functions are closely integrated. By contrast, two organisations where the scheme sits within the TTO have had particular difficulty in reconciling the approach with their KE philosophy. For these institutions, if the opportunity has value then it should be possible to construct a commercial deal, and if it does not then waiving the cost of the licence will not make it any more attractive.

Another potential pitfall concerns the choice of technologies to go into the scheme. Some organisations will try to find a partner for the technology using the traditional (for a fee) approach first, and will only put the technology into the scheme if this approach fails. The three organisations which always take this approach reported that they had not yet done any deals. The majority (seven) of the partners have a pragmatic approach, with some technologies taking the traditional route first, and others going directly into the scheme. This recognises that it is not always possible to decide at the outset how costly and risky the development path may be for the technology, or what its external value may be. In these cases, the best way to obtain this information is to try to market it using a traditional approach to see what response it receives. Depending on the feedback received, the decision may then be taken later that the technology would suit the Easy Access IP approach. Three organisations suggested that a technology should not be switched from a traditional route to an Easy Access IP route, and will make an early decision as to which route is the most suitable.

Other less common pitfalls were some more commercially oriented academics who feel that their technology has value and should not be offered for free, and some funders who find it difficult to reconcile the approach with their charitable objectives which require them to demonstrate that they have obtained value for their funding. The major UK funding agencies are enthusiastic about the scheme, however, and encourage its use where appropriate. As mentioned previously, there are also some situations where the one-page agreement is too simple, and a more robust legal agreement is required, for example to give sufficient confidence for venture funders to invest in the licensee company.

One potential pitfall which was envisioned when the scheme was first introduced was that it might lead to an expectation from companies that all technologies should be available for free. There is no evidence that this has happened, with seven organisations reporting that this has never happened, and that the expectations of partners for later stage opportunities are usually very different. Two organisations said that they had been asked for a specific technology to be made available under the scheme, but that the deal had gone ahead as anticipated (for a fee) when it was explained that the opportunity was not part of the scheme.

- The scheme works best with an internal champion and senior management support.
- It also works better where BD and TT are closely aligned and the activity is seen as core to their approach, and less well where responsibility lies with TTOs with KPIs more focused on commercial outcomes.
- Easy Access IP doesn't often work well for technologies which have failed to find a partner through a traditional licensing route.
- Some funders find it hard to reconcile the scheme with their charitable objectives.
- In some circumstances a more robust legal agreement is needed.
- There is NO evidence that it has caused industry to expect all IP to be available for free.

5.8 Categorisation of Partners

As can be seen from the analysis above, the organisations which make up Easy Access IP have different attitudes to the scheme, and have adapted the approach to fit with their local circumstances and KE approach. We have identified four different categories to describe these different approaches:

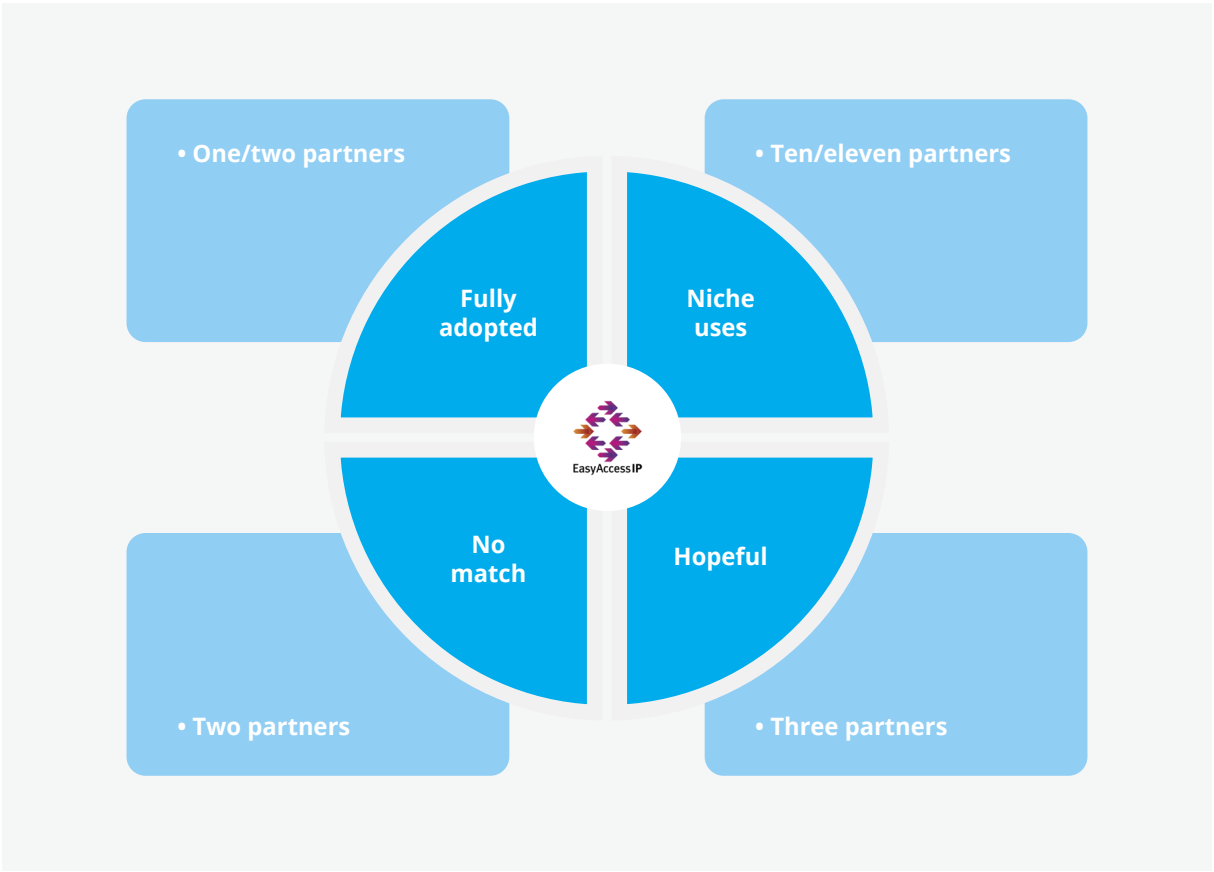

Figure 14: Categories describing the different approaches to the Easy Access IP scheme

Fully adopted: The University of New South Wales is the most enthusiastic adopter of the scheme, and uses it as their primary mechanism of engagement with industry partners. To a lesser extent, Glasgow has also integrated the scheme, and some of the other Australian partners also report that they are intending to move towards fuller adoption.

Niche uses: The majority of the partners find the approach to be valuable in specific circumstances, which may vary from institution to institution. For these organisations, Easy Access IP is a useful add-on, but has not fundamentally shifted their interactions with industry.

Hopeful: A few organisations have not yet managed to find the way in which Easy Access IP can improve their industry relationships. They report that the scheme isn't causing any harm or costing additional time or effort, and they are still hopeful that it will be able to deliver on its aims.

No match: Two organisations have found it difficult to align the philosophy of Easy Access IP with their approach to Knowledge Exchange and licensing. In particular, they struggle with the concept that if the technology has no value, then no-one will want it even for free, whereas if it does have (potential) value then it should be possible to construct a commercial deal. They intend to remain partners in the scheme, largely because of the "easy to do business with" message that membership sends to potential industrial partners, but have not been able to find a way to incorporate it into their systems.

Easy Access IP is an approach which has been found to have value in a range of different situations by the partner organisations. The majority of the partners find it a useful addition for specific, niche applications, but have not found that it causes a radical shift in the quantity, quality or value of their industrial interactions.

06. Responses to Easy Access IP

The introduction of Easy Access IP caused a high level of fervent debate, which in some cases appeared political rather than rational. In large part, this was a reaction to the way that the scheme was promoted and reported. As noted previously, "Free IP" is an over-simplistic description of the approach, and has led to some taking entrenched positions in the discussions. Some of the main arguments levelled against Easy Access IP are listed below, together with relevant findings concerning the point identified by this research.

Argument	Y/N/?	Research findings
Easy Access IP is not the only way of achieving the same aims.	Y	Many other approaches also exist, see section 7 for examples.
Another alternative is to offer the IP back to the inventors.	Y	This is in fact a common use for Easy Access IP, which provides a simple but effective means to achieve this.
The main beneficiaries are likely to be large multinationals, rather than SMEs.	N	The vast majority of reported deals are with SMEs.
If technology is given away, the system for deciding who receives it becomes more opaque, and open to abuse and conflict of interest.	?	No data available. No reports of these types of issue arising.
Application of the scheme needs proper market insight to decide which should be Easy Access and which traditional. This, and any patenting activity represent a resource demand on the TTO which must be paid for out of other funding routes.	Y	Partners agree that promotion of Easy Access IP opportunities needs the same level of resource as for other commercialisation methods.
Easy Access IP is not appropriate for all university IP or all situations. It also has the disadvantage of losing the possibility of returns from the IP which could be used to incentivise IP-generating activities and re-invested into research, teaching and technology transfer.	Y	Partners agree that Easy Access IP is a useful tool, but even the most wholehearted adopters acknowledge that it is not the right route for high value opportunities, which should take a traditional route to ensure that suitable returns flow to the University.
There needs to be a mechanism to ensure that businesses are able to access the exclusive IP position that they need, and that they do develop and exploit the IP.	Y	The Easy Access IP licence addresses these issues.
Companies may ask for commercial technologies to be treated under the Easy Access scheme, or wait until they are moved to it. This is a high risk strategy and so is unlikely to be taken where a technology is of strategic importance to a company.	N	No evidence that this has occurred. Some organisations will not transfer traditional opportunities back into the Easy Access IP scheme.
There is a reputational risk that the University doesn't have control over what is done with their IP. This is linked to the simplicity of the agreement, which leaves out some standard provisions.	Y/?	Partners acknowledge that this can be an issue in certain limited circumstances and use alternative agreements where relevant.

Argument	Y/N/?	Research findings
It would be better to solve the internal processes that make interactions difficult, rather than giving IP away for free. There is a case for standard terms, but not for standard free terms.	?	Agreement that standard terms are useful. Some indication that the "free" label helps to attract more interest. Insufficient evidence on whether Easy Access IP can lead to more research and other interactions than a standard (but not free) approach.
It should also be possible to use a mechanism to delay assigning a value to the technology until that value is realised, rather than assigning no value at all.	?	As above, these mechanisms exist, but there is not enough data to determine if one approach is more effective than the other.
Publication and teaching are better routes to "free" KE.	N	Suitable for some circumstances, but lose the ability to track income, does not provide the protection needed for industry adoption, and loses the opportunity to leverage other interactions.

07. Similar Schemes

The concepts of simple, standardised agreements and free transfer of IP in certain circumstances are not new. Many non-partner organisations use these mechanisms where appropriate for them, but without giving them the Easy Access label. Free licences for specific technologies, particularly for social enterprise and charities are offered by many Universities on an ad hoc basis. In general, however, these will not be specifically linked to some of the other objectives of the scheme, for example ensuring that impact outcomes are reported, and that the University retains research rights.

There are a number of related schemes which have been adopted which have similarities with the aims and methods of Easy Access.

In December 2011, the Scottish Funding Council (SFC) announced that all Scottish Universities would be making some of their technologies available free of charge through an easy access approach[13]. The adoption of the approach was linked to the provision of SFC funding for knowledge exchange under the Knowledge Transfer Grant[14]. Although this Scottish scheme uses many of the same principles as Easy Access IP, and in some cases uses the same agreements, only University of Glasgow is a full partner in Easy Access IP. Instead, this is a "Scottish" initiative, which is promoted through the University Technology website, which provides a single location to enable companies and investors from business and industry to find the technologies and technology transfer opportunities that Scotland has to offer. In November 2014, there were a total of 50 technologies from eight Scottish Universities on offer as "Easy Access" on this site, of which 14 came from the University of Glasgow.

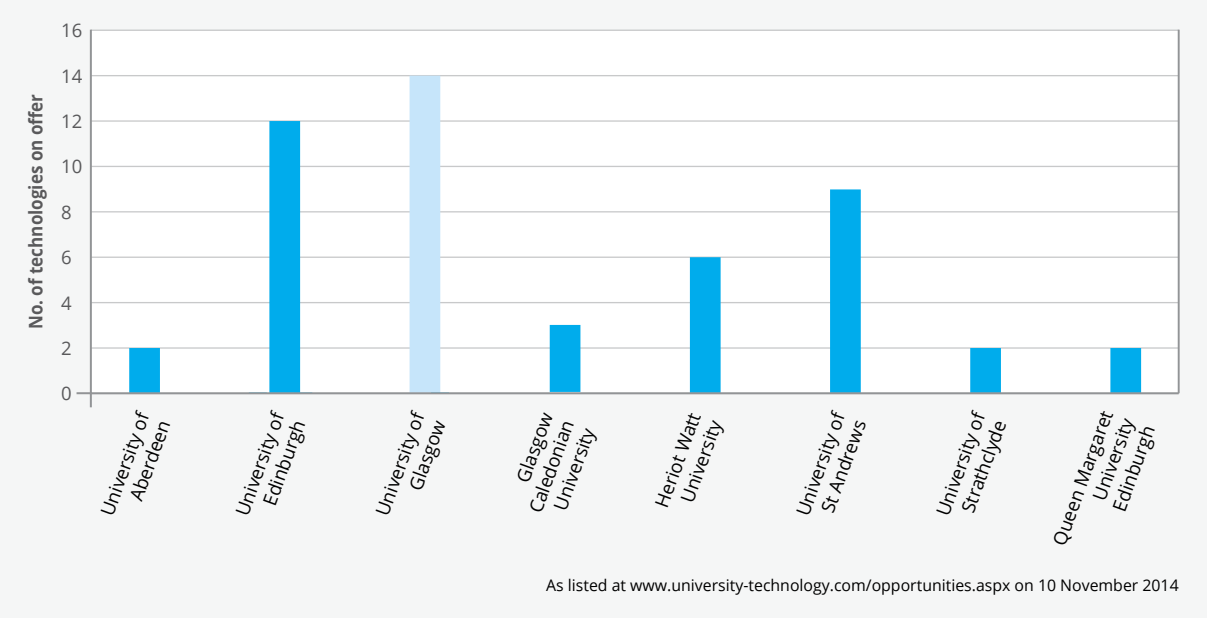

Figure 15: Scottish Easy Access technologies on offer

13 www.sfc.ac.uk/FundingImpact/KnowledgeExchange/KnowledgeExchangeOutcome.aspx

14 www.sfc.ac.uk/FundingImpact/KnowledgeExchange/Universities/KnowledgeTransferGrant/ KnowledgeTransferGrant.aspx

In their Outcome Agreement with SFC for 2014-17, the University of Glasgow have set a target of 10 new Easy Access IP technologies to be added to their portfolio each year, and report that 22 new technologies were added in 2012/13. The University of Edinburgh[15] call their approach "Open Technology", and in their Outcome Agreement reported that they have achieved 41 easy access and open technology licences in 2012-13. Edinburgh Napier University reported that they have generated 87 new Easy Access-type engagements. The University works in partnership with the University of St Andrews and Queen Margaret University which collectively have generated 122 such engagements. It is not clear whether these engagements are for technology licences, or if they are for research collaborations which include free access for the sponsor to the outcomes of the research (as in "Easy Access Research"). The remaining Scottish Universities have not published the number of deals that they have completed under this scheme. Overall the Scottish Easy Access scheme appears to be achieving more definitive outcomes in terms of licences and engagements than the Easy Access IP initiative, based on the data we have collated on Easy Access IP and the published figures from the Scottish initiative. It would be important to understand through a direct comparison what the reasons are for this difference, and whether it reflects changes in the way the scheme is being used, applied and reported, and/or a greater commitment and management buy-in to its implementation given that it is driven by SFC as the major funding body for these universities.

There are several other similar schemes which include so-called "bonanza clauses" which offer licences for free in specific situations, but allow the University to receive some revenue if the technology goes on to generate significant income.

The University of Manitoba[16] in Canada is using an approach named "Transformational Partnerships", which offers free access to IP arising from certain research collaborations, in return for a 1-2% royalty fee which only applies once the product or service starts to generate revenues.

Dublin City University in Ireland, offers "Licence Express"[17] which carries no upfront fee and provides a royalty holiday for four years with a subsequent flat 1% royalty rate. The entrepreneur wishing to take on technology under this scheme must submit a business plan showing how they plan to exploit the IP.

In 2013, the University of Minnesota launched the MN-IP[18] (Minnesota Innovation Partnerships) program which aims to remove the barriers to sponsored research at the University. This has two strands: "Try and Buy", provides companies with a low-cost, low-risk method to license existing university-developed technologies. Companies can take available technologies for a low cost "test-run" for a small fixed fee, and if they wish to take a licence after the trial period there are pre-set licensing terms, under which the first $1 million of product revenue is royalty-free. Companies based in Minnesota receive discounts for the trial period and a lower royalty rate. The "Create" program establishes industry-friendly terms up front for research collaborations, granting companies an exclusive worldwide licence to the resulting IP. There is a one-time fee of 10% of the sponsored research costs or $15,000, whichever is greater, and royalties of 1 percent apply only if product sales exceed $20 million per year.

The Instant Access program from Stellenbosch University in South Africa[19] uses a standard, simplified two-page term licence which gives full commercial use of the patented technologies for up to three years to assess their potential. The test period is free of charge, however, if any income is generated, a minimal Rand 1,000 licence fee per annum or 1% of the income generated as a result of using the technology, will be applied, whichever is the largest amount.

The University of North Carolina offers the Carolina Express License[20], which offers fixed terms for UNC start-ups, including no upfront fees, a fixed 1-2% royalty, and no maintenance payments for 3 years, and a fixed percentage value stake on exit. Unlike the Easy Access IP agreement, however, this Carolina Express License is 27 pages long, excluding appendices.

The concepts of simple agreements and free licences are not new, and many non-partner organisations achieve similar aims through mechanisms without the Easy Access IP label

15 www.research-innovation.ed.ac.uk/WorkingWithUs/OpenTechnology.aspx

16 http://techtransfercentral.com/reprints/ttt/313-u-manitoba

08. Achievements of the Easy Access IP Aims

The Easy Access IP scheme has not yet been in place long enough for a full evaluation of its role within knowledge exchange from research organisations. In looking at whether it is achieving its aims, we have taken a preliminary view of the evidence to date, but these should not be taken as firm conclusions. The founders of the scheme have stated that:

> *"The aim of Easy Access IP is to maximise partnerships with industry and ultimately, the transfer of university knowledge for public benefit."*

This can be broken down into specific aims and expectations, and the evidence as to whether these have been achieved is laid out in the table below:

Aim	Y/N/?	Evidence
Increase number of deals by removing perceived barriers	N	Number of additional deals is low (less than 2 extra deals per organisation each year, compared with a base level of >25 traditional deals per organisation each year).
Make deals easier to do	Y	General agreement that actual transaction is easier Value of the brand in marketing and impressions?
Maximise knowledge dissemination	Y	Examples seen of a range of "non-traditional" transactions eg social and student enterprises, and deals without formal IP protection. Can facilitate other categories of engagement.
More, richer partnerships	?	Number of new partners seems low with the majority of licensees already known to the University (limited data). Several suggest that it has facilitated agreement on wider engagement, such as research collaborations. Not tracked, so hard to assess.
Increased Impact	?	Limited publicity on deals done (10 out of 68 deals). Some organisations are not yet following up very rigorously. Still too early for good outcomes for most deals.

Easy Access IP set out a challenge to industry – if the low level of engagement is due to the difficulty of dealing with Universities, then removal of these barriers should lead to increased engagement from companies. This does not appear to have happened to a significant extent, so perhaps this demonstrates that other more fundamental issues are more important, and will allow the debate to move on.

17 www.dcu.ie/invent/dcu-licence-express-scheme.shtml

18 www.research.umn.edu/mn-ip/programs.html#.VMizF2jkd5I

19 www.bdlive.co.za/national/science/2012/10/03/university-offers-research-to-firms; http://www.innovus.co.za/pages/english/technology/instant-access-licensing.php

20 http://research.unc.edu/offices/otd/inventors/starting-a-company

During the interviews, 9 organisations suggested that the most important factors in limiting the commercialisation of University IP are:

- The costs in time, effort, money and risk of development and how these can be shared.
- The difficulties of marketing for the Universities – understanding who might benefit from their technologies, accessing these people, and getting their attention and engagement.
- Some University technologies are just not of sufficient commercial value to be of interest to industry, either because they do not address a market need, or because the return on investment needed to take them to market is not large enough to justify the risks.

For some of the aims of the scheme, it has been difficult to assess how well these aims are being met, either because the data are not well collected or because it is too early for significant outcomes to have occurred. This particularly relates to the claimed link between use of the scheme and increased industry engagement through other mechanisms, and the aim of enhancing the Impact from University research. In order to properly assess these aspects of the scheme, it will be necessary for the partner organisations to collect prospective data more proactively.

We also looked at the evidence surrounding the specific questions that were posed by BIS:

Question	Y/N/?	Evidence
Improve the flow of IP not just between Universities but into wealth creation activities within the UK.	**Y**	Majority of deals done by UK Universities are with local UK organisations Examples of a range of "non-traditional" transactions Approach improves the transaction stage of the deal.
Contribution to speeding the application and commercialisation of IP from HEIs.	**?**	Contribution limited by small number of deals done (average of ~1 per UK organisation each year) Too soon to assess speed of commercialisation. Does not reduce time and costs of marketing or of agreeing the deal Useful KE tool which can be additive to other activities Does not replace traditional routes for high value opportunities.

- The contribution of Easy Access IP to improving the commercialisation of IP for the participants is relatively small, but can be additive to other activities.
- Costs and risks of development, difficulties in reaching potential partners, and lack of commercial potential may be more important constraints to wider uptake of University IP.
- Easy Access IP has widened the debate about KE mechanisms, and added another approach and more flexibility to the KE toolkit.

09. Preliminary Conclusions

1. It is still too early to judge the success of the scheme for most participants.
2. Most participants are using Easy Access IP licences only very occasionally, and for only a small proportion of the licences that they sign.
3. Two organisations between them have carried out about 66% of the reported Easy Access deals. UNSW have made it the core of their knowledge exchange approach and the default mechanism of industry engagement, which they believe is responsible for their higher use of Easy Access IP deals.
4. Even where the scheme is not heavily used, the majority of participants find it a useful addition to the range of KE mechanisms available to them, and all intend to remain partners and continue to use the scheme where appropriate.
5. It provides an IP exploitation framework with diverse niche applications which are useful for different organisations, for example: as a hook to leverage other industry interactions; to handle the outputs of collaborative research; to facilitate social and student enterprise; to easily return IP to the inventor; for local SME engagement; to align KE activities with an ethos of achieving Impact, and to capture this activity.
6. The contribution of Easy Access IP to improving the commercialisation of IP for the participants is relatively small, but can be additive to other activities and can lead to other relationships.
7. It does not replace the traditional routes for exploitation of high value opportunities
8. The Easy Access IP brand is a valuable marketing tool both to academics and to potential industry partners, and sends a positive message that the organisation is open and easy to work with.
9. It reduces the staff time and legal costs of the transaction stage, but not the earlier marketing and partner identification stage. This means it saves more time and money for the company partners than the University partners.
10. Easy Access IP appears to be useful across the full range of technology subject areas, types of IP and stages of development.
11. Most deals are currently done with SMEs which are located close to the University. This may reflect the way that the scheme is being used by the participants, as well as the types of organisation which have adopted Easy Access IP.
12. Costs and risks of development, difficulties in reaching potential partners, and lack of commercial potential may be more important constraints to wider uptake of University IP.
13. Easy Access IP has widened the debate about KE mechanisms, and added another approach and more flexibility to the KE toolkit which is helpful.

9.1 Recommendations for Further Work

This initial investigation has gathered a full picture of Easy Access IP from the viewpoint of the participating Universities. It has been informed by anecdotal evidence from non-participating Universities and from companies, but it is not within the scope of the current work to gather robust evidence or comparative data from these groups. It is also clear that other similar schemes have been adopted and in some cases (e.g. the SFC-led initiative in Scotland) these appear to be having a greater impact in terms of the number of deals and new business engagements fostered.

To gain a more complete picture of the contribution of the scheme to improving the commercialisation of IP from Universities, we would recommend that the analysis is extended to include a more thorough investigation of some of the aspects which have been touched on in this report, such as:

- A more thorough investigation of whether the scheme has led to a measureable increase in research collaboration income at the partner Universities.
- Whether there is a correlation between the categories of adoption by the partners and the outcomes they have achieved.
- The attitudes and approaches of matched Universities which are not part of the Easy Access IP partnership.
- The attitude of company responses to the scheme, to include Easy Access IP licensees, traditional licensees, and other companies which interact with University research.
- The comparative outcomes of the Scottish scheme introduced by SFC and University Technology.
- The comparative advantages and disadvantages of other alternative schemes.

Appendix I: Current Partners in Easy Access IP

As listed on www.easyaccessip.com on 23 January 2015:

University of Glasgow

University of Bristol

King's College London

UNSW Australia

University of Birmingham

CERN technology

University of Copenhagen

dkfz.

Durham University

ECU Australia Edith Cowan University

ÉTS Le génie pour l'industrie

University of Exeter

Lancaster University

Linköping University

Macquarie University

Mittuniversitetet Mid Sweden University

uOttawa

Shanghai Jiao Tong University

Staffordshire University

University of Sussex

Swansea University Prifysgol Abertawe

University of Wollongong

University of Technology Sydney

University of Western Sydney Bringing knowledge to life

Appendix 2: Sample Easy Access IP Exclusive Licence

EXCLUSIVE LICENCE AGREEMENT

This licence, effective _____, ("Effective Date") is between [add name and address of the University] (the "**University**") and the party set out in Schedule 1 (the "**Licensee**").

WHEREAS the University has agreed to grant to the Licensee a licence to use, develop and commercially exploit the Technology and associated intellectual property rights (as described in Schedule 1).

IT IS HEREBY AGREED as follows:

1. In consideration of the Licensee's obligations under this licence, the University hereby grants to the Licensee, and the Licensee hereby accepts, an exclusive royalty-free worldwide non-transferable licence to use, make, develop, sell and commercially exploit the Technology in any way it deems appropriate subject to the terms and conditions of this Agreement.

2. The University reserves the right to use the Technology for teaching and research purposes, and to license the Technology to University students, visiting academics, and other academic institutions for research purposes.

3. The Licensee shall acknowledge the University's contribution through the provision of this licence at no cost in a manner which may be agreed between the University and the Licensee from time to time.

4. The Licensee will use reasonable efforts to use, develop and exploit the Technology in accordance with its statement of intent, a copy of which is set out in Schedule 2.

5. The Licensee shall submit to the University annual written reports at the end of the first, second and third years following the Effective Date describing how it has used the Technology and the economic and societal benefits generated therefrom. Beyond the third year and upon the University's reasonable request, the Licensee will provide further reports detailing the economic and societal benefits from use of the Technology, as necessary or desirable to enable the University to monitor and demonstrate the impact of its research.

6. The University may terminate the Licensee's rights if the Licensee has not used the Technology in accordance with its statement of intent within three (3) years from the Effective Date of this Agreement.

7. The parties shall agree how the costs of prosecution and maintenance of any patents, patent applications or other intellectual property rights relating to the Technology shall be met. Without prejudice to the generality of the foregoing, the Licensee may, at its discretion and cost, prosecute and maintain such intellectual property rights with such reasonable assistance at the Licensee's request and expense from the University as may be required, and provided the Licensee keeps the University informed on an annual basis of the progress of any such intellectual property rights. The University will not be obliged to prosecute or maintain any patents or patent applications for the Technology.

8. The University gives no warranty in relation to the Technology (including any warranty as to whether the Technology or any of the intellectual property rights subsisting in the same will infringe any third party rights, whether any of the patents is or will be valid or subsisting or in the case of any patent applications that it will proceed to grant), or the uses to which the Technology may be put by the Licensee, the Technology's fitness or suitability for any particular purpose or under any special conditions notwithstanding that any such purpose or special conditions may be known to the University. The Licensee acknowledges that it has satisfied itself on the foregoing matters and use of the Technology is entirely at its own risk. All conditions and warranties, express or implied, arising under statute or common law, are hereby excluded.

9. The University shall not be liable to the Licensee for any indirect, consequential or special losses or any loss of profits (direct or indirect) arising directly or indirectly from the University's breach of this Agreement or from any liability arising out of the subject matter of this Agreement even if the Licensee has advised the University of the possibility of those losses arising, or if such losses were within the contemplation of the parties. Notwithstanding the foregoing, nothing in this Agreement limits or excludes the University's liability for death or personal injury caused by its negligence, or for fraud or for any sort of liability that, by law, cannot be limited or excluded.

10. This Agreement is governed by, and shall be construed in accordance with, English law and the parties agree to submit to the exclusive jurisdiction of the English courts, save that nothing shall prevent either party from seeking injunctive relief in any court of competent jurisdiction.

Signed by the parties' authorised signatories on the date set out above.

By and on behalf of the University:		**By and on behalf of Licensee:**
Signed:	_____	_____
Name:	_____	_____
Title:	_____	_____
Date:	_____	_____

SCHEDULE 1

The Licensee means [add name, address, company number as appropriate of the Licensee].

The Technology and associated intellectual property rights means [add a description of the Technology and the IPR licensed under this Agreement]

SCHEDULE 2

[Append/set out the Licensee's Statement of Intent]

Appendix 3: List of Easy Access IP Technologies Currently on Offer

Table A1: Easy Access IP opportunities listed on public websites, as at 23 January 2015

Organisation	Title	Description
CERN	3D Magnetic sensor calibrator	This is an innovative device for calibrating magnetic field with high resolution. The technology measures all three axes of the magnetic field, by performing a scan over the full unit sphere, independent of its orientation relative to the magnetic field.
CERN	RF Waveguide Vacuum Valve	This device enables low-loss RF power transmission in a waveguide across a gap, where a liftable instrument is positioned.
CERN	Thermally insulatable vessel	The Thermally insulatable vessel is a simple container system for hot substances, incorporating a temperature display within the vessel's cap or lid. The key element in this technology is an integrated infra-red thermometer developed with Micro-Electro-Mechanical systems on a common silicon substrate through micro fabrication technology.
CERN	Multifunctional Detector	A multifunctional, versatile position-sensitive detector for measuring characteristics of a beam of particles. The technology consists of a microwire-based monitor that allows measuring non-destructively the spatial profile, divergence, and intensity of UV, x-ray, and charged particle beams, including anti-particles.
CERN	Cryogenic optical fiber temperature sensor	The technology consists in a simple and relatively cheap cryogenic temperature sensor, composed of an optical fiber and a Brillouin spectral analyzer for measuring one or more temperature dependent Brillouin scattering parameters.
ETS	Six-Degree-Of-Freedom Parallel Robot With Cylindrical Workspace And Large Tilt Motion	The robot consists of a five DOF structure, including two five-bar mechanisms each with two motors attached at a common base. This base is mounted on a linear displacement system, thus achieving the final DOF.
ETS	Three-axis (X-Y-theta) planar parallel robot	The XY-Theta stage precision positioning table is based on the parallel mechanism and has three articulated legs consisting of linear actuators, sliding blocks and a linear guide. Regardless of the orientation of the moving platform, the simultaneous displacement of actuators 1 and 2 only results...
ETS	VDDQ INTEGRATED CIRCUIT TESTING SYSTEM AND METHOD	This system allows the rapid detection of faults in CMOS type integrated circuits. In addition, it allows detecting non conforming voltage levels in logic gates designs.
King's College London	Preventing cavities the SMART way	A topical gel that can be placed around the teeth to prevent infection with Streptococcus mutans; the main cause of dental cavities.
Macquarie University	Gated Auto-synchronous Luminescence Detector (GALD)	Low Noise Fluorescence Microscopy: This invention relates to hardware which is easily attached to a standard microscope and when used with a suitable fluorescent tag, it can facilitate the rapid detection of tagged pathogens using delayed fluorescence.
Macquarie University	Synthesis of Ageladine A	A one-step synthesis method that uses inexpensive reagents and does not require water/oxygen exclusion.

Organisation	Title	Description
University of Bristol	Prevention of hypertrophy in chondrocytes used for cartilage replacement	A tissue engineering group at the university has developed a treatment for stem cells used to create cartilage which reduces undesirable creation of bone-like tissue.
University of Glasgow	Cardiac Imaging	The University of Glasgow has developed novel Cardiac Imaging software to be used in existing Cardiac MRI equipment, automating the current process to reduce potential errors.
University of Glasgow	Cell Adhesion	University of Glasgow scientists have borrowed techniques employed in the semi-conductor industry to pattern the surfaces of either hard or soft materials and render these surfaces less adhesive to cells.
University of Glasgow	Components for Miniaturised Atomic Clocks and Atomic Magnetometers	A new type of Optoelectronic Integrated circuit (OEIC) has been developed at the University.
University of Glasgow	Covert Security Labelling	The University of Glasgow has developed a novel, covert, chip-less smart label technology for protecting branded items.
University of Glasgow	Football Fans in Training	The University of Glasgow's Football Fans in Training (FFIT) is an innovative collaboration between academics, Scotland's top football clubs and the Scottish Professional Football League Trust. FFIT delivers gender-sensitised weight loss and healthy living programmes to overweight and obese men aged 35-65 at their favourite football clubs
University of Glasgow	Hybrid Image Creator	Schyns Illusion is a novel technique that takes advantage of the ability of the human visual system to separate information coming from different spatial frequency channels.
University of Glasgow	Lab in a Pill	Scientists at the University of Glasgow have pioneered a new sensor technology, Lab-in-a-Pill, that could have major impact on the cost and effectiveness of bowel cancer treatment.
University of Glasgow	Newsboy - video retrieval system	A video retrieval system has been developed which automatically captures daily news broadcasts and segments the bulletins into news stories according to the user's interests.
University of Glasgow	Parkinson's Disease Model	The University of Glasgow is offering an exciting new model for the evaluation of new treatments for Parkinson's disease
University of Glasgow	Preparation of highly pure N-Formyl Benzotriazoles	The University of Glasgow's patent protected synthesis of N-formyl benzotriazoles offers a product with much greater yield and higher purity compared to any previously known syntheses
University of Glasgow	SightSim - insight into how others see the world	Children with visual impairment don't complain of poor vision because they don't know what they can't see. SightSim™ has been developed to help make their world a more visible place.
University of Glasgow	Silicon Carbide Bonding	A novel, patent protected method of bonding silicon carbide has been developed at the University of Glasgow.
University of Glasgow	Storyboards and Animatics for the Web	Pre-visualisation tools for animation have been developed which marry up storyboard entries and soundtrack to give a sense of the finished product in the form of a so-called 'animatic'.

Organisation	Title	Description
University of Glasgow	Telomerase Promoter - cancer therapies	The University of Glasgow has developed a telomerase targeted adenoviral suicide-gene therapy vector (Ad-hTR-NTR) which has been extensively tested on Ovarian cancer cells.
University of Glasgow	Terrier - terabyte retriever	Terrier is a highly flexible, efficient, and effective open source search engine, readily deployable on large-scale collections of documents.
University of Glasgow	Thermoelectric Sensor	The Thermoelectric Sensor technology is a Nano-Calorimetric Sensor which measures very small changes in temperature. The IP provides a route to making the most sensitive calorimetric measurements (with a resolution of (0.1 mK).
University of Glasgow	Ultra fast data transfer devices	This technology from the University of Glasgow, partially covered by a pending patent, offers a new and cheaper way to achieve connectivity of more than 1000 times broadband speed.
University of Glasgow	Ultra High Speed Polarisation Controlled Laser Source	Researchers at the University of Glasgow have developed monolithically integrated polarisation control for 3D displays and optical communications.
University of Glasgow	Vector Pascal	Vector Pascal is an extended version of the popular programming language Pascal which has been designed to make efficient use of the multimedia instruction sets of recent microprocessors from AMD, Intel and other manufacturers.
University of Glasgow	PVDF Glycoarray	The University of Glasgow have identified a novel way of looking at proteins that bind glycolipids in membranes in a new process called combinatorial glycorray.
University of Glasgow	Optoswim	Researchers at the University of Glasgow have developed a technology that stimulates schooling behaviour and optimal swimming speeds in fish, providing an effective research tool for studies related to fish swimming and exercise.
UNSW	Improved Fuel System for Scramjets	A Fuel System developed to increase the energy density and lower the ionisation threshold for hydrogen and hydrocarbon fuel in high speed air breathing engines such as scramjets. The Technology The development of scramjet technologies has suffered from the need to improve reliability and r...
UNSW	Reliable Laser Ignition for Scramjets	A laser induced ignition system developed for Scramjet engines and other gaseous flows. The Technology The development of scramjet technologies has suffered from the need to improve reliability and reduce ignition speeds and temperatures. Various methods of ignition have been used to overcome...
UNSW	A New Weapon to Control Bacterial Biofilms	Smart Chemistry to Disperse Biofilms that form in Industrial and Medical Environments The Technology is available under licence for FREE Biofilms are associated with a number of diseases and chronic infections, including cystic fibrosis and chronic wounds. Biofilms also form on medical equipment...
UNSW	Reducing the risk of surgery	The Invention One of the major risks associated with surgery is stroke. In order to minimise the risk of stroke, patients are normally given anti-coagulants like heparin which prevent the blood from forming dangerous clots that could dislodge and block blood flow through arteries...

Organisation	Title	Description
UNSW	Faster, smaller, higher capacity USB sticks and RAM products	A revolutionary material – for ultra-high density data storage capacity with minimal fabrication costs The Technology This invention is a revolutionary matrix material that can be developed into a super performance USB stick or memory product. With the plethora of USB sticks and other...
UNSW	How Private is Your Video Conference?	Software to Protect your Private Information during Video Conferencing How Private is Your Video Conference? The Technology is available under licence for Free Given the technologically advanced world we live in, it’s hard to believe, that video conferences or Skype calls are not secure,...
UNSW	Breakthroughs in carbon nanotube epoxy improve mechanical performance	Super Strength Composites ...When product reliability is critical! The Technology is available under licence for FREEUNSW researchers have developed an efficient lower cost method for manufacturing laminated composite structures for applications requiring the utmost in reliability and high performance. Whether you're looking for the...
UNSW	Improved anti-cancer contrast agents	Nanocarrier combines Chemical Release and Image Contrast Capabilities for Targeted Drug Delivery The technology is available under licence for Free This technology has the potential to improve cancer treatment. The nanocarrier architecture, a polymer-nanoparticle hybrid system, functions as a theranostic: both a diagnostic and therapeutic agent. ...
UNSW	Quality Control for Producing More Powerful Solar Cells	A new tool to measure the photoluminescence of solar cells, quickly, with more flexibility than ever before Read more >
UNSW	Antifouling Polymers	Say NO to Biofilms! Bacterial Biofilms are a cause of industrial fouling, corrosion and infection. When formed on medical equipment such as catheters and implantable devices, biofilms can cause severe illness such as septicaemia. Biofilms are stubborn and difficult to remove as the bacteria are...
UNSW	Protecting the unborn during chemotherapy	With this new potential therapeutic agent we can preserve fertility during chemotherapy and avoid premature menopause following treatment
UNSW	Tougher Bearings, Bushes and Gear Motors	This technology is a leap ahead for brass alloys. 'Low-Cost High Entropy Brasses' (HEBs) with their unique alloy composition are up to 20% cheaper
University of Wollongong	Funky Battery	The Funky Battery" is a self-powered sensing & delivery devices technology. It contains electrodes that do more than simply store and deliver charge: it is a functional battery that can be activated when switched on by a sensor.
University of Wollongong	Kneesleeve	The technology involves the use of "intelligent" fabrics to provide immediate feedback with respect to human motion for a diverse range of applications. Fabrics are coated with inherently conducting polymers to form strain gauges that can be used as integrated components of clothing and/or items that can be comfortably worn during physical activity.
University of Lancaster	Cryptographic key generation	Mobile devices increasingly need means of securing communication over ad hoc links to prevent eavesdropping. Classically this needs a cryptographic key. Our invention allows two devices to generate a shared secret key by processing mutually available ambient data - eg a common image or a shared pattern of movement.

Organisation	Title	Description
University of Lancaster	Wave Energy Device	This wave energy device has “outrigger” floats. These are buoyant and increase the (pitch) stiffness of the overall device while decreasing its rotational inertia. This allows wave energy devices to be made larger while maintaining a resonant frequency in the range desired, and thus increases extracted power per device, and cost-efficiency.
University of Lancaster	Energy-generating fish ladder	There is increasing interest in river hydropower projects, but ecological safeguards are often required. This invention (UK patent pending) is a small footprint helical fish ladder. By allowing the helix slowly to rotate, the descending water also generates useful power.
University of Lancaster	Intelligent rope	The intelligent rope (UK patent pending) contains a multitude of sensors, firstly to measure and report its 3D configuration to an external computer, secondly to measure and report ambient data along its length. Many uses are envisaged for emergency services, military, rescue services, commercial diving, and cave exploration.
Swansea University	SUPERCALC (P100002)	Calculators are used to get the right answer when you don’t know what that answer should be. Unfortunately if you make any slip in a calculation, you simply get the wrong answer. While this may be merely inconvenient for many, in a safety critical environment (such as a hospital — in radiotherapy or drug dosing) numerical errors can be fatal.
University of Exeter	Controllable magnetic systems: Miniaturised controllable magnetic devices	Miniaturised controllable magnetic devices capable of propulsion (swimming) in fluid systems of low Reynolds number. Devices may be induced through a non-contact magnetic control system to swim through a viscous liquid that may be flowing or if the device is fixed within a channel it may be used as a pump or valve.
University of Exeter	Electrochromic smart glass	Glass-backed graphene for use in an electrochromatic device. The smart glass can be switched between translucent and opaque within five seconds.
Linköping University	Wii – Heartening News For HF Patients	Good news comes in threes, they say. And in this case, they are right. Not only are more patients surviving a heart attack, but those who do are living longer, as well. And now a recent pilot study suggests that a modest regime of exercise with active video games can improve HF patients’ daily activities. This is a promising strategy to improve their survival and quality of life.
Linköping University	Improved User Feedback	We offer a unique method to support early testing of services and IT prototypes to make sure that your IT solutions meet the user expectations.
University of Technology Sydney	Accord: Lower Back Pain Relief	The Reverse Curve Spinal Support, developed at the University of Technology, Sydney, is a new way of treating non-specific Lower Back Pain by placing the spine in a position of reduced load and relaxing the hypertonicity that is strongly associated with this condition.
University of Technology Sydney	Adaptive Base Isolation System	The new MRE base isolator developed by UTS researchers is the first adaptive based isolator addressing a major challenge faced by conventional base isolator design in terms of adapting to various types of earthquakes. This technology has great potential in seismic protection applications in civil engineering.
University of Technology Sydney	Simskin: Simulated Skin	Researchers at the University of Technology, Sydney have developed a simulated skin panel adapted for use in simulated medical diagnostic or treatment procedures, where the simulated skin panel is able to selectively provide a plurality of visual or tactile indicators of medical conditions or symptoms.

Organisation	Title	Description
University of Technology Sydney	Solar Stand	The Solar Stand is an accessory designed to enhance the performance and usability of flexible thin-film solar-panels. It is designed to expand the existing rollable solar panel market towards the mainstream leisure market by transforming Silicon Amorphous Solar Panels into a useable and viable product.
Mittuniversitetet	PER-model	A model for family support in dementia, which saves resources and increases quality. Developed by Härnösand Municipality and Mid Sweden University in collaboration.
Mittuniversitetet	Better school quality	Licence to the brand: “Kulturanalys”

Appendix 4: Publicly Announced Easy Access IP Deals

University of Glasgow and Elliot Scientific

Combining high speed cameras with laser beam technology enables researchers to measure movement on a sub-atomic scale with an extraordinary degree of accuracy. These optical tweezers can be used to examine in very fine detail mechanistic movements that are taking place within the body on a microscopic level every day – for example, protein and enzyme reactions in chemistry, and how the DNA repair engine works. Professor Padgett's research group is developing software for these camera elements for Hertfordshire-based Elliot Scientific, which produces high quality scientific instruments, including optical tweezers.

www.gla.ac.uk/news/archiveofnews/2010/november/headline_181588_en.html

University of Glasgow and NewMetrica

The company will use the questionnaire-based tools developed at the University over a number of years, to help assess the health and wellbeing of pets and farm animals. The technology is being developed for use by veterinary professionals and owners.

www.ncub.co.uk/a-fresh-approach-to-intellectual-property-easy-access-ip.html

University of Glasgow and Boulder Nonlinear Systems

Portable Optical Trapping System known as 'The Cube'. The Cube provides researchers with a stand-alone optical tweezers system which is designed around a custom inverted microscope. This compact instrument allows optical trapping and thus physical manipulation of hundreds of microscopic objects in three dimensions using an iPad control to set and move each optical trap independently.

www.ncub.co.uk/a-fresh-approach-to-intellectual-property-easy-access-ip.html

University of New South Wales and Roam Consulting

The University of New South Wales has successfully delivered its first free-of-charge intellectual property to an industry partner, reconnecting a former PhD student with his clean-energy creation. Roam Consulting, a Brisbane-based firm that specialises in energy market modelling, has used UNSW research to develop Wind Insight, a commercial wind power forecasting software.

By extracting key information from numerical weather prediction systems, the program can alert power system operators in advance of potential rapid changes in wind power output. This allows operators to more effectively manage the grid and set up power reserves as needed, which will help maintain power system security.

www.innovations.unsw.edu.au/blog/2012/08/unsw-delivers-first-free-technology-under-easy-access-ip

University of New South Wales and Dr Damian Conway

Two UNSW researchers, Dr Damian Conway and Dr Rylie Green who were accepted into the program have been granted “Easy Access IP” licences which allow them to commercially develop technologies they have developed through research at UNSW.

Dr Damian Conway from the Kirby Institute was accepted into the program to develop a rapid “point of care” diagnostic tool developed during Dr Conway’s PhD. The single use diagnostic tool replaces existing diagnostic technologies which involve multiple lancet punctures which are stressful and time consuming for both patient and clinician.

www.innovations.unsw.edu.au/blog/2014/10/unsw-researchers-given-%E2%80%9Ceasy-access%E2%80%9D-nsw-medical-device-commercialisation-training

University of New South Wales and Dr Rylie Green

Two UNSW researchers, Dr Damian Conway and Dr Rylie Green who were accepted into the program have been granted “Easy Access IP” licences which allow them to commercially develop technologies they have developed through research at UNSW.

Dr Rylie Green from the UNSW Graduate School of Biomedical Engineering was accepted into the program to develop new surface coatings for biomedical electrodes. Dr Green’s hydrogel surface coating reduces scarring of the tissue which surrounds the electrode of implanted medical devices and can also be used as a controlled release agent for drug delivery.

www.innovations.unsw.edu.au/blog/2014/10/unsw-researchers-given-%E2%80%9Ceasy-access%E2%80%9D-nsw-medical-device-commercialisation-training

University of New South Wales and Zedelef

NewSouth Innovation (NSi), has assigned to Zedelef the IP protecting its core “optical voltage sensing” technology. This technology, originally developed at the University of New South Wales by Zedelef’s founders, was initially licensed by NSi to Zedelef under the novel “Easy Access IP” scheme.

http://zedelef.com.au/wp/?p=189

University of New South Wales and Atamo

Atamo is pleased to announce that it has executed a licence agreement with New South Innovations (NSi) the commercialisation arm of the University of New South Wales (UNSW) under the University’s Easy Access IP program. The agreement provides for Atamo to seek to commercialise Intellectual Property that is the subject of a provisional patent application in relation to a method and apparatus for testing for vision defects. The agreement anticipates that an ongoing mutually beneficial relationship will develop between UNSW/NSi and Atamo for this and other potential projects.

www.atamo.com.au/index.php/news?start=6

University of Wollongong and NanoCarbon

Graphene consists of thin sheets of carbon that are extracted from raw graphite. It has extraordinary mechanical and electrical properties: it is stronger than diamond, more conductive than copper and more flexible than rubber. Potential manufacturing applications for the new material range from more powerful, faster-charging batteries to dramatically improved data storage and far more efficient solar cells.

The UOW-headquartered ARC Centre of Excellence for Electromaterials Science (ACES) has developed a patented process for production of graphene that has been licensed to NanoCarbon, a NSW-based start-up company that is developing commercial applications for graphene, through an Easy Access IP agreement.

http://media.uow.edu.au/releases/UOW176566.html

University of Technology, Sydney and Mobility 2000

UTS is giving Mobility 2000 free access to technology developed by UTS robotics researchers under a new Easy Access IP agreement, the first licence of its kind issued by the university.

Researchers from the UTS Centre for Autonomous Systems have been collaborating with Mobility 2000 to develop a step-climbing attachment for two-wheel drive powered wheelchairs, enabling users to navigate kerbs and (at present) single steps without needing to buy a whole new wheelchair.

The system can be added to an existing chair and when in place allows individual wheelchair wheels to be raised and lowered in a controlled fashion. It currently has only manual control, but the researchers are looking at semi-autonomous control, where a control system will decide the appropriate time for each lift or lower action.

http://newsroom.uts.edu.au/news/2014/03/improving-accessibility-one-step-time

IP PRAGMATICS LIMITED

IP Pragmatics (www.ip-pragmatics.com) is a specialist consultancy that provides a range of intellectual property management and commercialisation services to assist universities, government research institutes and companies to increase their commercial revenue from their research, expertise and facilities. The company helps clients to create and realise value from their intellectual property assets through the provision of integrated intellectual property and business development services.

IP Pragmatics Ltd, 1 Quality Court, Chancery Lane, London, WC2A 1HR
+44 203 176 0580 | www.ip-pragmatics.com | @IPPragmatics | elaine.eggington@ip-pragmatics.com

National Centre for Universities and Business
Studio 11, Tiger House, Burton Street, London, WC1H 9BY

info@ncub.co.uk +44 (0)207 383 7667 @NCUBtweets **www.ncub.co.uk**