

# HERC IP Framework – consultation response

20 October 2021

## Introduction

This is a timely opportunity to improve the commercialisation system for all participants - universities, researchers, industry and investors. It should look to build upon the improvements that have occurred over the past five years and the significant increase in commercialisation activity that we are currently seeing in Australia.

It should be noted that Australia performs competitively in recently published international comparisons of research commercialisation income generation and licences and is improving significantly in spinouts. However, there is potential to improve the system by targeting areas to create incentives for engagement and to assist in building effective relationships, while preserving those parts of the system that are working well.

There is a need to provide further incentives for industry-university collaboration and investment in research, in order to build the pipeline of ideas for commercialisation.

The IP framework needs to be designed carefully to avoid perverse outcomes, such as constraining activity by imposing too much regulation that might discourage partners (especially international organisations). Most commercialisation deals, and all significant ones, are inherently complex and are not suited to an off-the-shelf template or templates for the agreements. For this reason, while starter agreements are useful, mandating their use would be counterproductive.

In acknowledging the complexity of commercialisation, and the range of stakeholders, we recommend greater engagement with the rapidly growing investment community, as well as taking the time to involve other government agencies, including Treasury, Finance, Industry and Agriculture, as well as.

There is a need for a holistic approach and map for enhanced research and research commercialisation. We note the essential role of discovery in the pipeline of IP development and commercialisation, and the need to support it with strong continued funding for discovery and applied research.

## Context

Australia has room to improve on current performance in research commercialisation, although it has areas where it is internationally competitive. (Please refer to attached tables)

Monash University has equity in 19 spinouts who together have raised circa \$150m over the last five years. Over the next six months a further seven spinouts are in formation and a similar number raising additional investment capital from local and international investors. We have also seen growth in our licensing program from 21 licences in 2016 to 33 in 2020. The growth in spin-out activity has been significant in the absence of mandated IP agreement templates.

One major gap in the current Australian innovation system is funding for the translation of early-stage research and access to funds to demonstrate proof of concept of innovations so that projects reach a stage where they can attract licensees, venture capital or other investment funding to realise desired outcomes.

We should also note that Australia has few research-intensive large industry players. As a result, much of our local research commercialisation activities are with SMEs. This can result in a mismatch of experience between the partners meaning that these agreements take longer to complete and with higher transaction costs than is ideal for all parties. These issues are generally not seen when working with larger (Australian or international companies) where the skills and experience are much more closely matched. As a result there should be efforts to enhance the capabilities of local SMEs to engage with universities through education and dedicated support, ideally through an independent intermediary.

The commercialisation process is characterised by many complications and highly volatile variables at all stages, including development cycles, regulatory expectations, innovation timeframes, as well as stakeholder expectations. These are not standard and mandating the use of an IP framework will only add to complexities.

## Discussion

The core problem is not with institutions who engage regularly including large experienced collaborators and strategic investment partners. The challenges are faced mostly by smaller, less experienced innovation partners. They lack resources, experience and trust in the process.

A standard set of agreements, like the Lambert Agreements in the UK, or a modified version of the IP Toolkit from IP Australia will help to build confidence and trust with these partners. They should serve as a starting point and should not be mandated.

From our experience, the best value comes from getting everyone on the same field, but not insisting all follow the same template. Flexibility in the adoption and adaption of agreements will be essential to enable investors to play their own game with each different partner. For example, two of Monash's key investment partners structure their deals differently, which are again different from international investors, who increasingly want to work with Australian universities. These international investors will have their own standard approaches as a starting point and if forced to adopt an Australian mandated agreement, may instead be deterred. Differences in agreements are necessary for different circumstances - trying to mandate specific structures or agreements will be counterproductive.

Nor should these templates be made mandatory where government funding is involved. There may be multiple private funders of the early-stage research in addition to government, university and other funding bodies. That research will often have taken place over many years and even decades and so it can be difficult to determine which sources of funding led to which outcomes. Where government funding has made a material contribution to the outcome the approach taken needs to be determined through consultation.

We are also concerned that the framework as proposed conflates contract research with commercialisation of innovation and IP generated through grant funded research. Contract research is about bringing resources and partners into the university to do research, whereas commercialisation is about taking the outputs of research and finding external partners and investors with whom to commercialise it. Although they might both involve IP, they differ in how they are administered as well as in their scale and complexity. Contract research is a commissioning of research, mostly for a fixed price with agreed deliverables, such as reports. Commercialisation is a more complex process in which the outcome is less certain, and the money invested is at risk.

## Recommendations

Without being able to see the full scope of the agreements, and their drafting, it is not possible to comment in a meaningful way on many of the discussion questions.

Instead, for greatest impact in improving collaboration and commercialisation outcomes, we recommend that the consultation and resulting framework:

1. Is not mandatory.
2. Focuses on the goal of enabling commercialisation partners to build confidence and trust in each other to encourage collaboration.
3. Includes template agreements and clause banks as a starting point, supported with an education component to upskill parties on the use of the templates.
4. Recognises that contract research and research commercialisation are two different undertakings, that should not be conflated into one set of agreements.
5. Avoids overlap by incorporating the existing IP toolkits and guides (IP toolkit and National principles of intellectual property management for publicly funded research) rather than creating new materials. Commercialisation is already a complex undertaking to navigate.
6. Adopts a realistic timeframe to enable consultation on the actual framework itself, with other government stakeholders in commercialisation process and in the context of the full research commercialisation scheme.

[Attachment: Selected global commercialisation metrics](#)

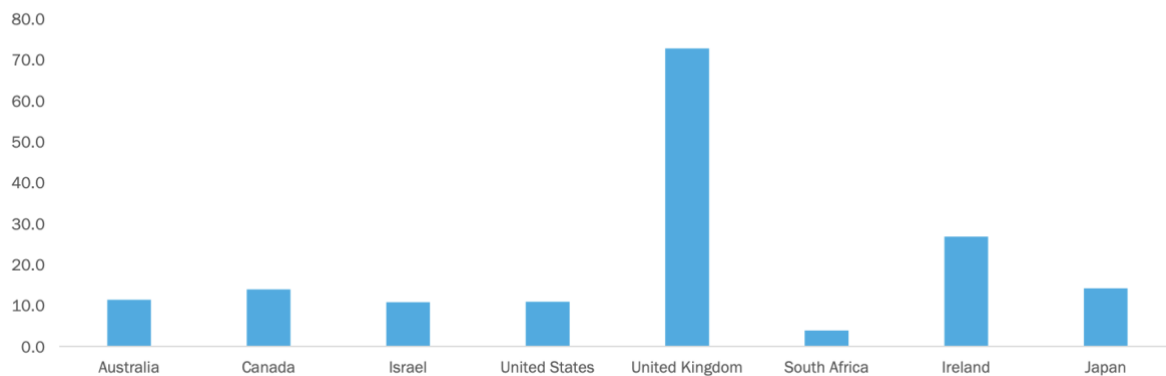
## Selected global commercialisation metrics, Association of Technology Transfer Professionals

### Activity

Licensing activity – Licence, Options and Assignments (LOA) Executed per USD100m Research Expenditure (No.)

|                | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013  | 2014 | 2015 | 2016 | 2017  | 2018 | 2019 |
|----------------|------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|------|------|
| Australia      | 10.5 | 11.5 | 12.4 | 11.7 | 9.5  | 9.3  | 8.8  | 11.9 | 7.5  | 9.4   | 10.4 | 9.1  | 10.9 | 16.5  | 16.6 | 16.6 |
| Canada         | 16.4 | 16.4 | 12.0 | 16.0 | 14.2 | 14.2 | 10.8 | 13.0 | 12.0 | 9.4   | 12.1 | 14.4 | 18.4 | 13.9  | 15.7 | 13.8 |
| Israel         |      |      |      |      |      |      |      |      |      | 9.3   | 9.8  | 8.2  | 10.9 | 7.3   | 13.3 | 17.0 |
| United States  | 11.6 | 11.7 | 10.9 | 10.5 | 10.0 | 9.9  | 9.1  | 9.9  | 10.0 | 10.1  | 11.0 | 11.9 | 11.6 | 11.5  | 13.0 | 12.6 |
| United Kingdom | 34.1 | 41.5 | 45.6 | 42.4 | 48.9 | 50.3 | 55.2 | 78   | 93.9 | 146.5 |      |      | 56.8 | 135.4 | 98.4 | 92.0 |
| South Africa   |      |      |      |      |      |      |      |      |      |       | 2.9  | 4.2  | 3.6  | 4.9   | 3.9  |      |
| Ireland        |      |      |      |      |      |      |      |      |      | 23.3  | 26.8 | 31.1 | 27.6 | 23.1  | 28.8 | 26.5 |
| Japan          |      |      |      |      |      |      | 8.6  | 7.2  | 10.4 | 10.3  | 12.1 | 12.4 | 13.4 | 15.1  | 21.2 | 31.9 |

Historical average number of LOA per US\$100m Research Expenditure

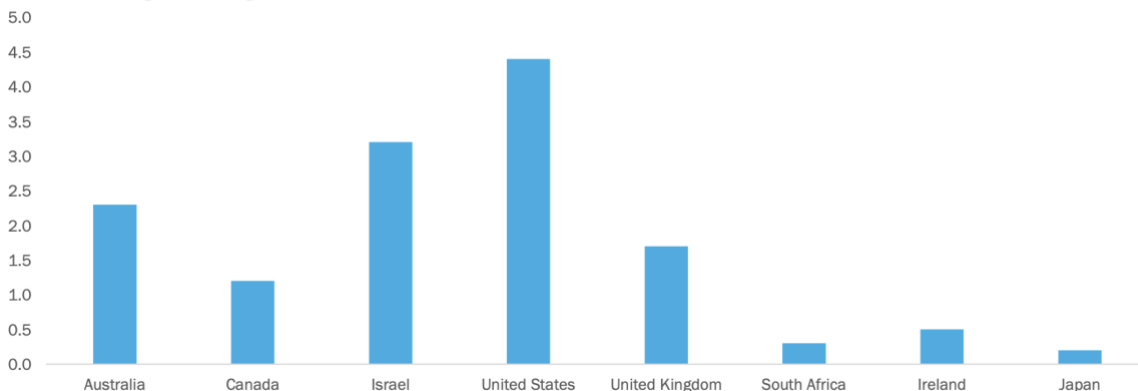


### Revenue

Ratio of LOA Income to Research Expenditure (%)

|                | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Australia      | 1.3  | 1.4  | 2.2  | 3.4  | 1.5  | 4.0  | 1.9  | 2.2  | 3.5  | 1.3  | 1.3  | 2.0  | 1.3  | 5.1  | 1.6  | 2.2  |
| Canada         | 1.4  | 1.2  | 1.4  | 1.2  | 1.0  | 1.0  | 1.0  | 1.2  | 1.3  | 1.0  | 1.5  | 1.0  | 1.2  | 1.2  | 1.3  | 1.2  |
| Israel         |      |      |      |      |      |      |      |      | 3.8  | 3.3  | 3.7  | 3.9  | 2.8  | 2.2  | 2.5  |      |
| United States  | 3.6  | 5.0  | 4.8  | 5.5  | 6.7  | 4.3  | 4.1  | 4.0  | 4.1  | 4.2  | 4.3  | 3.8  | 4.4  | 4.6  | 4.1  | 3.3  |
| United Kingdom | 1.5  | 1.4  | 1.3  | 1.4  | 2.1  | 1.3  | 1.1  | 1.2  | 1.3  | 1.9  |      |      | 2.2  | 1.9  | 2.5  | 2.6  |
| South Africa   |      |      |      |      |      |      |      |      |      |      | 0.3  | 0.3  | 0.2  | 0.3  | 0.4  |      |
| Ireland        |      |      |      |      |      |      |      |      |      | 0.3  | 0.4  | 1.0  | 0.5  | 0.3  | 0.3  | 0.4  |
| Japan          |      |      |      |      |      |      | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  |

Historical average Percentage of LOA Income to Research Expenditure (%)

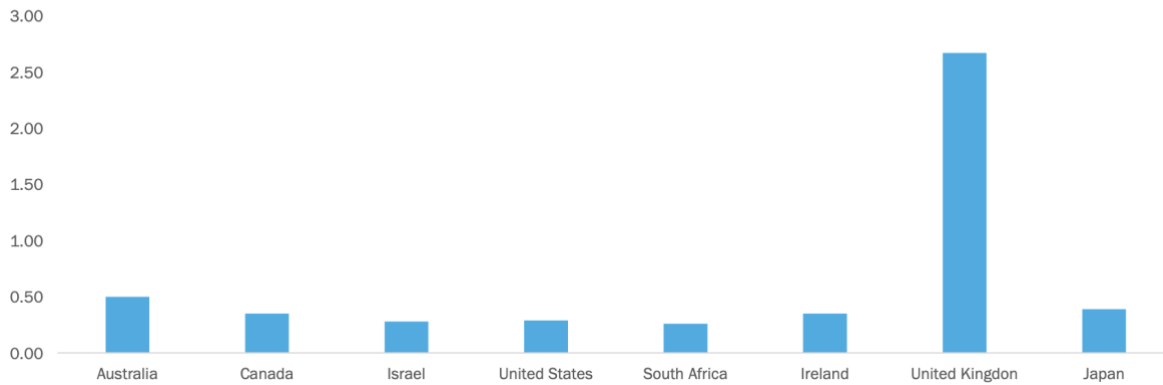


## Efficiency

Knowledge Transfer Efficiency Ratio – LOA to IP Disclosure

|                | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Australia      | 0.40 | 0.49 | 0.47 | 0.46 | 0.35 | 0.34 | 0.31 | 0.29 | 0.35 | 0.44 | 0.61 | 0.45 | 0.59 | 0.85 | 0.81 | 0.85 |
| Canada         |      | 0.40 | 0.30 | 0.37 | 0.35 | 0.22 | 0.31 | 0.32 | 0.31 | 0.22 | 0.30 | 0.39 | 0.55 | 0.38 | 0.44 | 0.42 |
| Israel         |      |      |      |      |      |      |      |      | 0.00 | 0.25 | 0.20 | 0.21 | 0.25 | 0.21 | 0.32 | 0.50 |
| United States  |      | 0.28 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.28 | 0.27 | 0.27 | 0.29 | 0.31 | 0.30 | 0.31 | 0.36 | 0.37 |
| South Africa   |      |      |      |      |      |      |      |      |      |      | 0.18 | 0.25 | 0.28 | 0.38 | 0.23 |      |
| Ireland        |      |      |      |      |      |      | 0.22 | 0.28 | 0.23 | 0.30 | 0.40 | 0.44 | 0.40 | 0.32 | 0.45 | 0.46 |
| United Kingdom |      |      |      |      |      |      |      |      |      |      |      | 1.85 | 1.48 | 3.72 | 2.69 | 3.58 |
| Japan          |      |      |      |      |      |      | 0.19 | 0.18 | 0.27 | 0.30 | 0.34 | 0.35 | 0.36 | 0.42 | 0.60 | 0.88 |

Historical yearly average of Knowledge Transfer efficiency measured as a ratio of LOA to IP Disclosures



Source: [SUMMARY OF SELECTED GLOBAL COMMERCIALISATION METRICS: 2004 - 2019](#), August 2021, Association of Technology Transfer Professionals, accessed 121021