HE-BCI record 2023/24 - General guidance on Table 4: Intellectual property (IP) - Proposed

Version 1.0 Produced 2024-04-04

- Table 4 provides more detailed analysis of intellectual property (IP), which the World Intellectual Property Organization (WIPO) describes as "creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce." Income from all IP agreements from all types of IP should be included in Table 4.
- 2. Disclosure is the point at which academic staff disclose their idea through a formal process with the prospect of seeking protection. It is good practice to record the date of disclosure and to operate a standardised process that supports evaluation of the commercial potential of the disclosure.
- 3. Table 4 is designed to collect IP income to the HE provider, as this provides an evidence base for transactions that set a minimum bound on the value or impact of IP originating within the HE provider. Only IP income to the HE provider should be recorded.
- 4. IP may commonly be exploited through licences granted by the HE provider to another organization, thereby allowing access rights to protected IP. In other cases the HE provider may support the foundation of a spin-out to commercialise IP originating with the provider.
- 5. Intellectual property can be protected by establishing legal rights, for example through registration (a-c, below) or through an automatic protection (d and e, below):
 - a) Patents inventions, for example, machines and machine parts, materials, tools, medicines
 - b) Design registration appearance of a product including, shape, packaging, patterns, colours, decoration
 - c) Trade marks product names and appearances, logos, jingles
 - d) Copyright writing and literary works, art, photography, films, TV, music, web content, sound recordings, and software
 - e) Database rights these apply to databases that are not protected by copyright. See <u>https://www.gov.uk/guidance/sui-generis-database-rights</u> for details.
- 6. Intellectual property may in some cases be protected by maintaining confidentiality using a range of practical, technical, and/or legal means. Confidential information may, for example, be protected through the use on non-disclosure agreements (NDAs) or confidentiality agreements. Know-how (by which we refer to skills, expertise, and knowledge) is generally and normally separate from legally-protected IP. Further information on IP and how to protect it can be found at the <u>Intellectual Property Office (IPO) website</u>. A good general guide to intellectual property rights and definitions is available from the <u>Government Office of Technology Transfer</u>.
- 7. Patents may only be returned prior to assignment. Providers must omit patents from their cumulative portfolio figure once assigned. Assigned patents must be excluded from sub-

headings 1b; Number of new patents applications filed in a year, 1c; Number of patents granted in a year and 1d; Cumulative patent portfolio.

- 8. Where a provider has filed a patent family which has then been assigned, they must not return subsequent new patent applications in this family. Applications for new patents to an assigned family must be excluded from sub-heading 1e; Number of patents filed by an external party naming the HE provider as a co-applicant.
- 9. Income from design interactions and licensing of IP should be recorded. An example would be a chair design produced by the HEP for a furniture manufacturer.
- 10. Where the HE provider conducts work to meet a specific development need (public or private) which is part of the operating model of the external partner, the contribution of the HE provider should be returned. An example would be creating 'mood music' by which the HE provider asserts copyright rights.
- 11. Income from ventures (e.g. spin-outs) using transferred-in IP originating with the reporting provider must be reported in Table 4.
- 12. Further information about spin-outs is gathered in Table 4a, which continues Table 4 on a new worksheet for ease of presentation and completion.

Head 1: Disclosures and patents filed by or on behalf of the HE provider

Sub-head 1a: Number of disclosures

13. Disclosure is the point at which academic staff disclose their idea through a formal process with the prospect of seeking protection.

Sub-head 1b: Number of new patent applications filed in year

14. This should include all new patent applications, including (where relevant) <u>Patent Co-operation Treaty</u> (PCT) applications. Where the same invention is patented in multiple jurisdictions return only the application that has priority. Continuations or divisions of existing applications are not eligible for inclusion. Applications made under the PCT should only be counted once in this sub-head.

Sub-head 1c: Number of patents granted in year

15. This should include individual patents and any individual national patents.

Sub-head 1d: Cumulative patent portfolio

16. This should include the number of individual active and live patents. Active patents are those currently registered under licence to an external party. Live patents are those registered but yet to be licensed.

Sub-head 1e: Number of patents filed by an external party naming the HE provider as a coapplicant or staff as a named inventor

17. This number should be separate and additional to the cumulative number of patents as it reflects only those filed by an external partner. This data is being requested to provide insight where HE has contributed intellectual property that was not previously being captured in a systematic manner.

18. Patents granted in the name of the external party where the HE provider is a majority shareholder and the IP originated from within the HE provider could be included here if the University's staff member is named on the patent.

Head 2: Licence numbers (including licencing of patents, copyright, design registration and trademarks)

- 19. This head should include:
 - a) Licence agreements (non-exclusive and exclusive)
 - b) Assignments (out)
 - c) Exercised option agreements (on IP already generated excluding options embedded in research agreements where IP is still to be created)
 - d) Licences to spin-outs (either royalty or equity bearing)
 - e) Income-generating Material Transfer Agreements (MTAs)
 - f) All income-generating licences should be returned, regardless of when they were agreed.
- 20. This head can include either the total number of licence numbers or the total number of licensees.
- 21. Income should be provided by partner type (SME, non-SME commercial and noncommercial) for non-software and software only licences.
- 22. For purposes of return to HE-BCI, a licence must be a legal agreement between two or more parties and not include open licences. This is to reduce burden and to exclude licences where there is no significant interaction resulting in knowledge exchange. The sale of books (including ebooks and audio books) should not be returned as there is no significant interaction where knowledge exchange involved.

2av and 2bv Total number of licences generating income in the period

23. The total should be less than or equal to the total number of licences.

Head 3: IP Income (including patents, copyright, design registration and trademarks)

- 24. This head should include any income from:
 - a) Upfront/milestone fees
 - b) Royalties
 - c) Patent costs reimbursement

received from the licence agreements in head 2.

25. Enter a figure of zero or greater to represent the amount of income received from IP in the relevant . If the reporting provider has no potential source of income from IP in that category (rather than a source of income that has yielded zero income during the reporting year) return NULL.

26. Intellectual property (IP) income figures should be provided by partner type (SMEs, Other (non-SME) commercial businesses, and Non-commercial organisations).

Sub-head 3c: Other IP income

27. Income from IP not captured in 3a – non-software licences income and 3b – software licenses income, should be captured here. Examples include royalty payments or dividends received from spin-outs.

Sub-head 3f: Total IP revenues

28. This total should record the gross income to the HE provider, net of VAT, before disbursements to investors and other interested parties. As such this total should differ from that recorded in the Finance record under Income from intellectual property rights.

Sub-head 3g: Total costs

29. IP expenditure should be reported here. It should include salary and related costs of specialist IP staff, patent and other protection fees and legal expenses.

Example 1:

Client: SME/Private/Public Type of IP: Patents, design registrations, copyright, trademarks. Exploitation: Any and all IP exploitation should be considered for HE-BCI Return: Income from all IP agreements, from all types of IP should be included.

Example 2:

Client: SME

Type of IP: Patent on new technology filed by the HE provider

Exploitation: Licence to allow production of a product based on the patent

Return: The HE-BCI record is designed to collect IP income to the HE provider as this provides an evidence base for transactions that set a minimum bound on the impact or value of the IP. Only income to the HE provider should be recorded.

Example 3:

Client: Large entertainment corporation

Type of IP: Copyright

Exploitation: Writing of 'mood music' by staff at the HE provider on behalf of the client Return: Music written for a specific business need (public or private) is part of the business model of the external partner and therefore the contribution of the HE provider should be acknowledged.

Example 4:

Client: Furniture manufacturer

Type of IP: Design registration

Exploitation: Design of a chair by staff at the HE provider is mass-produced by the manufacturer Return: Income from design interactions and licensing should be returned in Table 4.

Head 4: Spin-out activity

30. Spin-outs are firms that are founded based on intellectual property (IP) generated through a HE provider's research. For the purpose of HE-BCI, we interpret this as comprising all firms that exploit IP, which has both emerged from research originating within the HE provider, and which can be protected using legal means.

- 31. It is not necessary that the IP transferred-in to the spin-out has in fact been protected, but it must be of a nature that is amenable to the establishment of intellectual property rights. For example, while a firm formed using, say, physical research assets of the HE provider and staff with skill and knowledge (but transferring-in no protectable IP) is of interest and we encourage it to be returned in Head 4a where another category is applicable, it would not conform to our definition of a spin-out and therefore not fall within coverage of Head 5.
- 32. The date of foundation is the date when IP is transferred-in to the firm (i.e. when the IP is licensed or assigned). All new spin-outs founded in the reporting year must be included, regardless of the date of incorporation. The following approaches are listed in priority from (a) highest in descending order. Where more than one approach pertains, HE providers should return the first date available to them from the list below.
 - a) For spin-outs where the IP has been protected (paragraph 5 refers) use the transfer date of the IP as the foundation date
 - b) For spin-outs where the IP has been kept confidential (paragraph 6 refers) use the date of the NDA or confidentiality agreement
 - c) For spin-outs where there is a formal contract between the firm and HE provider that covers the IP, the date associated with contract signature should be used
- 33. We use the term "firm" in line with the <u>Companies Act (2006)</u> to mean any entity, whether or not a legal person, which is not an individual and includes a body corporate, a corporation sole and a partnership or other unincorporated association. A firm may be independent, or a subsidiary within a group. This is consistent with our aspiration to include the widest range of legally distinct ventures within the coverage of the record. Other terms such as "company" "subsidiary" and "holding company" are also used in the sense defined in the 2006 Companies Act.
- 34. A firm can be considered to have been founded to exploit IP that originated with the provider either when it has been founded with that explicit purpose and is actively exploiting the IP, or when an existing firm acquires IP, in exchange for equity in the company, with the intention of pursuing its commercialisation as its only or main activity at that point, and is demonstrably doing this. An example would be a Staff or Student start-up that later acquires IP from the HE provider, the exploitation of which is central to its future business model. In this case, we would consider the former start-up to have become a spin-out. However, each firm may only be returned once in this Head during a reporting year.
- 35. Ownership in a spin-out includes both legal and beneficial ownership. Ownership may be exercised through a group structure (for example where the spin-out becomes a subsidiary of a firm over which the HE provider exercises ownership).
- 36. All investment from the HE provider and external partners should be included with the exception of public funds to support KE activities which are allocated to the firm by the HE provider, such as the Higher Education Innovation Fund (HEIF) in England, the NI HEIF in Northern Ireland, the University Innovation Fund in Scotland (to be known as the Knowledge Exchange and Innovation Fund from AY2024-25), and the Research Wales Innovation Fund in Wales, which should be excluded. Public funds (such as those from Innovate UK and the European Union) where the firm has won a grant through a competitive process may be

returned. Spin-outs with a different financial year to the academic financial year reported in HE-BCI should be returned pro-rata.

Sub-head 4ai/4bi: Spin-outs with some HE provider ownership

37. These are spin-outs where the HE provider continues to have some ownership. Tracking should cease if the spin-out ceases to be active.

Sub-head 4aii/4bii: Other spin-outs

- 38. These are defined as spin-outs which have IP assigned to them and either have no ownership by the HE provider, or have exited from HE provider ownership.
- 39. When a spin-out ceases to be a firm (whether independent or as a subsidiary of a group) or it ceases to be active, tracking should cease.

Sub-head 4aiii/4biii: Staff start-ups

- 40. Staff start-ups are defined as firms where the HE provider has assisted in the creation of the venture. Start-ups must be formally registered, for example by incorporation as a limited company registered with Companies House.
- 41. Staff start-ups are established by active or recent academic HE provider staff (i.e. those who have held a contract of employment within the past two years). The FTE for these staff members should be greater than 0.25.
- 42. Sole traders must have notified HMRC that they operate independently or in a business partnership.
- 43. Staff start-ups are not based on IP that has both emerged from research originating within the HE provider, and which can be protected using legal means. In general this means that a firm based on know-how would be considered a start-up rather than a spin-out.

Sub-head 4aiv/4biv: Student start-ups

- 44. Student start-ups can be recorded under this sub-head. This should include all new businesses started by students currently registered at the reporting HE provider or graduates who have exited the reporting HE provider with an award within the last two years, but only where there has been formal business/enterprise support from the HE provider.
- 45. Not all IP created by students will emerge from research, and not all start-ups are based on IP. However, where a student founds a firm to exploit IP that has emerged from research originating within the HE provider, and which can be protected using legal means, this will conform to the definition of a spin-out rather than a start-up, and therefore be more properly returned under sub-head 4ai or 4aii. This would then fall into coverage for Head 5, also.
- 46. Start-ups can have any corporate form and use any business model but there must be some form of registration (for example with Companies House) before they can be included in the record. Sole traders must have notified HMRC that they operate independently or in a business partnership.

- 47. HESA would only expect this to cover students or graduates registered at and reported by the HE provider. Graduation should be taken to mean the point at which the student graduates from their studies, not completion of the business support programme.
- 48. Those HE Providers which foster active links with their alumni community may find the sourcing and update of information on graduate start-ups an easier task. There are additional benefits for HE Providers that foster such links with start-ups through networking, guest lecture and mentoring opportunities.

Sub-head 4av/4bv: Social enterprises

- 49. While there is no formal definition, more information on social enterprises can be found at <u>Social Enterprise UK</u>. Social enterprises may have been formed by students, recent graduates and/or staff. It is accepted that turnover and investment figures are by definition different from those provided for spin-outs and start-ups, but the data will be valuable in tracking public contributions from higher education.
- 50. Unlike the other categories, the broad and informal definition used here includes all legal organisational structures including charities and all business structures. HE providers should report enterprise/ventures which are established to deliver products or services which bring about positive social change i.e. organisations that rate their success on their social outcomes equally or more than their commercial outcomes.
- 51. Social Enterprises must be registered with a relevant body. This could be as a limited company with social impact defined in the governing documents, or, for example as a Community Interest Company (CIC), co-operative or charity.
- 52. It is understood that some such enterprises/ventures may have been returned under subheads 4ai to 4aiv in previous years. While there will be some overlap, it is expected that the majority of data returned under this category will represent activity that would not have been returned under HE-BCI otherwise.

Notes on completion of Head 4

53. When completing the column sections in head 4, the sub-heads i - v in the table should meet all of the relevant definitions listed above, to be considered active.

Column 4 (Number (of new firms within the reporting period))

54. For number of firms, HE providers should return the number of new founded spin-outs or new registered start-ups or social enterprises for the reporting period under this column.

Column 5 (Number still active which have survived at least 3 years)

55. Those firms which have been active for three years or more should be included under this column. For spin-outs this means three years since founding, and for all other firms it means three years since registration.

Column 6 (Number of active firms)

56. The total number of active firms should be included under this column. This should include the sum of totals entered under 'number' and 'number still active which have survived at least 3 years' plus those registered firms which have been active for between one and three years.

Columns 7, 8 and 9 (Estimates)

- 57. Estimates for staff, turnover and external investment should be included where possible under 'estimated current employment of all active firms (FTE)', 'estimated current turnover of all active firms (£000s)' and 'estimated external investment received (£000s)', respectively.
- 58. 'Estimated external investment received' should include all the investment received from the HE provider and external providers during the reporting period, but exclude any investment from public schemes designed to support KE.
- 59. These are estimated variables. Providing that you have a sound basis for these figures, it does not have to be provided directly by the business. For example, public data from Companies House, published accounts etc. can be used here. A sound basis means using a consistent methodology that is reasonable, defensible and fit for purpose.
- 60. As turnover figures are taken from company accounts then the standard accountancy definition of turnover should be used, i.e. the total of all money that passes through a business each year as a result of the sale of goods and services.

Example 5a:

Incorporation type: Limited company registered with Companies House during the reporting year

Type of IP: University patent for a new drug delivery system

Transfer-in of IP: Licence granted during the reporting year

Ownership: equity stakes

Exploitation: Solving engineering challenges to bring the drug delivery system to market Return: A new spin-out with some HE provider ownership formed in the reporting year (Head 4ai, Columns 4 and 6)

Example 5b:

Incorporation type: The company in example 5a that was registered with Companies House during the previous reporting year, is acquired.

Type of IP: University patent for a new drug delivery system

Transfer-in of IP: Licence granted during the previous reporting year

Ownership: The deal on acquiring venture capital funding is as follows: the company is acquired (along with another company developing a novel drug) by a new holding company, formed for the synergistic exploitation of the IP transferred into both firms. The original spin out is now a wholly-owned subsidiary of the holding company, which in turn is wholly owned by a joint venture capital fund. This fund is part-owned by the HE provider.

Exploitation: Bringing a novel drug with a novel delivery system to market.

Return: The spin-out is still trading and still based on IP originating within the HE provider. While the HE provider's ownership arrangements have changed substantially, it remains an owner of the spin-out through its subsidiaries. Although a new holding company has been formed, no new IP or licensing arrangements are involved. The return should therefore now be for a single spinout with some HE provider ownership that is active in the reporting year (Head 4ai, Column 6)

Example 5c:

Incorporation type: Company from examples 5a and 5b registered with Companies House during the reporting year before last is now dissolved, with all assets and liabilities taken on by the

holding company that owns it

Type of IP: University patent for a new drug delivery system

Transfer-in of IP: Licence granted two reporting years ago is now novated to the acquiring holding company

Ownership: equity stakes in the holding company

Exploitation: Bring the novel drug and delivery system to market

Return: Although the original company has ceased to be active, the novation of the IP and the persistence of the ownership arrangement means that the company is still considered a spinout. It should be returned as a spin-out with some HE provider ownership that is active in the reporting year (Head 4ai, Column 6)

Example 6:

Incorporation type: Company registered with Companies House during the previous reporting year (and previously reported correctly as a Staff start-up in Head 4aiii, Columns 4 and 6) Type of IP: University patent for a new data storage system

Transfer-in of IP: Licence granted during the reporting year

Ownership: exclusive license issued in exchange for company shares

Exploitation: Converting business interest generated through consultancy conducted through the start-up into an investment in scaling up prototype manufacturing of the patented data storage system.

Return: The staff start-up has converted into a spin-out and should now be returned in Head 4ai, Columns 4 and 6.

Example 7a:

Incorporation type: Firm registered as a sole trader with HMRC more than three years ago Type of IP: Know-how based on skill and knowledge, but no formally-protected IP Transfer-in of IP: A technician pursues the creation of a software start up by negotiating a reduction in hours and taking a desk in the HE provider's innovation centre at a preferential rate including business support.

Ownership: Contractual relationships defined by remaining employment contract and contract for use of innovation centre, which includes share options on successful acquisition of venture capital funding.

Exploitation: Developing new code as a proof of concept for a new software package, with a view to gaining investment

Return: A staff start-up that has survived at least 3 years (Head 4aiii, Columns 5 and 6)

Example 7b:

Incorporation type: Company in example 7a incorporates as a limited company during the reporting year

Type of IP: Know-how based on skill and knowledge, but no formally-protected IP Transfer-in of IP: As in Example 7a – no change

Ownership: Technician secures venture capital funding from an external investor, and takes a seat on the board as the CTO along with the venture fund manager and a managing director appointed by them both. The HE provider also takes a small shareholding. The HE provider offers the company preferential rates on a new unit on its technology park, and the company moves into the new space.

Exploitation: Scaling the proof of concept and taking it to market.

Return: Although the HE provider now has some formal legal ownership in the company, and is receiving some income from the technology park rental as well as (potentially) from its shareholding, the IP that the company is based on was never owned by the HE provider as it was know-how of the (now very part-time) technician, and hence cannot be considered to be a form of IP that is amenable to protection through legal rights of ownership. The venture is therefore still returned as a staff start-up that has survived at least 3 years (Head 4aiii, Columns 5 and 6). Income from the rental unit on the technology park may be eligible for return in Table 2, but any income from this venturing would not be returnable in HE-BCI. The company is not returnable in Table 5.

Example 8:

Incorporation type: Established mechanical pump co-operative company registered with the FCA many decades ago, but never before having licensed IP, now seeks to pivot

Type of IP: Patent on a novel material

Transfer-in of IP: Licence agreed during the reporting year

Ownership: Company is owned by its employees – but the HE provider is issued with a new class of share and becomes a member under the terms of the licensing arrangements.

Exploitation: The company wishes to utilise the novel material described in the patent to develop as its main product, a pump that can operate under extreme conditions, and take this to an existing market where there is demand for such a product.

Return: The company (previously not returned to HE-BCI) has become a spin-out during the reporting year through the transfer-in of IP owned by the university, in exchange for equity, in line with the co-operatives newly-adopted rules. It should therefore be returned in Head 4ai, Columns 4 and 6, as well as in Head 5.

Example 9:

Incorporation type: Limited company set up to test materials

Type of IP: Know-how based on skill and knowledge, but no protectable IP

Ownership: HEP-owned shares in the company. Also, HEP leases research equipment to the company, with provisions for a minimum level of exclusive use and maintenance in an agreement.

Exploitation: external companies seeking the department's know how and equipment form a sizeable part of the department's income. Department decides to form a new company to exploit a growing market.

Return: While the HEP part-owns the company, and the equipment is research equipment, and the know-how of the staff has arisen from research, there is no IP that can have legal rights established over it. The company does not meet the definition of a spin-out, so should not be returned in Head 5, but can be returned in Head 4a, iii-vi, depending on the other facts about the company.

Head 5: Spin-outs

- 61. For presentational reasons, Table 4 is continued on a separate worksheet, labelled Table 4a, to gather further information about spin-outs.
- 62. The purpose of this head is to capture basic information about spin-outs that enables a list of spin-outs to be created, known as the spin-out register. This list provides a published comprehensive list of university spin-outs as the basis of the spin-out evidence base. This approach will allow linking and identification of these firms in other data sources to produce

data about spin-out activity (such as data currently collected in columns 7-9) principally for policy development, delivery, and evaluation purposes; official statistics improvement; and research. Our aim is to remove the need to collect estimates in columns 7-9 from HE providers, along with removing the need for separate sub-heads 4ai and 4aii to distinguish between spin-outs with some HEP ownership, and other spin-outs, in future.

- 63. Entries in Head 5 are required for spin-outs with the following coverage:
 - a) all new spin-outs founded in the reporting year
 - b) all active spin-outs

Columns 10-16 (Identification)

These variables are required to identify the spin-out in other data sources, to link and match records, and to perform post-collection quality checks using linked data.

- 64. Column 10 (Identification: Name) is a text string of up to 160 characters. Please record the name of the firm as currently registered with Companies House or equivalent. This field must be completed for all spin-outs.
- 65. Column 11 (Identification: CRN) is an alphanumeric code of up to 8 characters. For UK-based companies, this is the Company Reference Number (CRN) for the official record of incorporation registered at Companies House. It In the case of more recently-registered companies based in Scotland and Northern Ireland this is a six-digit number preceded by the two-letter codes "SC" or "NI", and for all other companies is an eight-digit integer. Where there is no registration at Companies House, this column may be blank, but *either* column 12 *or* columns 13 and 14 must be completed.
- 66. Column 12 (Identification: Alternative or additional UK reference number) is a 50 character text string. If column 11 has not been completed, either column 12 or columns 13 and 14 must be completed. Enter alternative reference numbers for the firm here, such as in cases where the firm has been registered on the FCA <u>Mutuals Public Register</u> This column may also be completed in addition to column 11 where, for instance, the firm is also registered as a charity with the Charity Commission for England and Wales, the Charity Commission for Northern Ireland, or the Office of the Scottish Charity Regulator. The field is long enough to incorporate multiple numbers if required.
- 67. Column 13 (Identification: Country of registration) is a 2 character alphanumeric field. The country in which the firm has been registered must be listed for all entries. For firms registered in the UK, the code "XK" (United Kingdom, not otherwise specified) should be used. A full look-up table of national country codes is provided in the HE-BCI coding manual.
- 68. Column 14 (Identification: Non-UK registration number). Many overseas jurisdictions use a similar eight-character format to the UK, but this is a 50 character text string to permit variations in format. If column 11 has not been completed, either column 12 or columns 13 and 14 must be completed. If columns 13 and 14 are completed, columns 11 and 12 must be blank. Please enter the reference code or number assigned to the company on incorporation in an overseas jurisdiction. Where no number or code is given, type "NOT APPLICABLE"
- 69. Column 15 (Identification: Website) is a 2,000 character text string. This column is used to capture the spin-out's official website, where available, to aid identification of the spin-out in other data sources.

70. Column 16 (Identification: Alternative web source) is a 2,000 character text string. This column is used to capture alternative web-based information about the spin-out that can help to uniquely identify it. Examples are press articles, social media posts or other relevant source material that helps establish the existence, identity and nature of the spin-out. This column is especially important where no company website exists (column 15).

Column 17 (Typology: social enterprise)

71. Column 17 (Typology: social enterprise) captures information about the characteristics of the spin-out. Respond "Yes" if the HE provider considers that the spin-out met the definition of a social enterprise during the reporting year.

Columns 18 - 23 (Creation)

We recognise that a company may be incorporated prior to its foundation as a spin-out through the transfer-in of IP. These data help us to separate the latter concept (which is of importance in defining the firm as a spin-out) from the former (which is useful for linking and matching to other data sources).

- 72. Column 18 (Incorporation year) is a four-digit integer. It represents the calendar year during which the firm was registered with an appropriate authority, such as Companies House.
- 73. Column 19 (Incorporation month) is a two-digit integer between 01 and 12 inclusive. It represents the calendar month during which the firm was registered with an appropriate authority, such as Companies House.
- 74. Column 20 (Incorporation day) is a two-digit integer between 01 and 31 inclusive. It represents the day of the month during which the firm was registered with an appropriate authority, such as Companies House.
- 75. Column 21 (Foundation year) is a four-digit integer. It represents the calendar year during which IP was transferred into the spin-out.
- 76. Column 22 (Foundation year) is a two-digit integer between 01 and 12 inclusive. It represents the calendar month during which IP was transferred into the spin-out.
- 77. Column 23 (Foundation year) is a two-digit integer between 01 and 31 inclusive. It represents the day of the month during which IP was transferred into the spin-out.

Columns 24 and 25 (Origin)

These columns enable the nature and origins of the IP being commercialised by the spin-out to be understood. This will support policy development, delivery and evaluation, official statistics development, and research. Our initial priority is to support the selection or development of appropriate classification schemes for spin-outs, to permit these classifications to evolve as new industries, technologies, or types of IP emerge. These classification approaches will also support fair comparisons of spin-out performance and deal terms.

78. Column 24 (Description of nature of IP and its intended application) is a 2,000 character text string. This column is used to describe the IP being commercialised by the spin-out. A brief abstract of this IP and the opportunity it is being applied to is requested. Either the disclosure form or the appropriate evaluation note in the database maintained by the technology transfer office (or equivalent) is likely to be the primary record for this information. Do not return personally identifiable information in this field.

79. Column 25 (Department) is a 100-character text string to capture a description of the originating academic department(s), research centre(s) or other relevant academic unit(s). Do not return personally identifiable information in this field.

Columns 26 - 29 (Ownership during reporting year)

These columns capture features of the ownership relationship between the HE provider and the spin-out. Each is a yes/no binary variable and you should answer each independently as there may be several dimensions to the HE provider's ownership relationship with the spin-out, including aspects not captured by these columns. These columns will allow us to track changes in ownership over time, supporting analysis of the spin-out landscape, developing new typology of spin-outs and identifying key trends.

- 80. Column 26 (Ownership during reporting year: shareholding) captures information about the equity stakes the HE provider held in the firm during the reporting year. Respond "Yes" if the HE provider (or its subsidiary) possessed a shareholding in the spin-out during the reporting year.
- 81. Column 27 (Ownership during reporting year: licence) captures information about the ongoing relationship between the HE provider's IP and the spin-out. Respond "Yes" if the HE provider had an active license with the spin-out during the reporting year.
- 82. Column 28 (Ownership during reporting year: other) captures information about the ongoing relationship between the HE provider's IP and the spin-out. Respond "Yes" if the HE provider had any other type of ownership during the reporting year.
- 83. Column 29 (Ownership during reporting year: other ownership description) captures information about the ongoing relationship between the HE provider's IP and the spin-out. This is a 100 character text field. If you responded "Yes" in column 28, please describe briefly the nature of the HE provider's ownership of the spin-out during the reporting year.

Columns 30 - 32 (Major milestones)

- 84. Column 30 (Major milestones: first milestone) captures information about whether the spinout has experienced a significant event during the reporting year, and the nature of this milestone event. Where there has been more than one such milestone event during the reporting year, report the first chronologically in this column. Please pick one from a list of values. These are:
 - a) merger and acquisition (M&A) deal the firm has been sold to another firm.
 - b) management and employee buy-out when those already working at the firm buyout ownership
 - c) sell-out of either shares or control when the firm's owners sell their stake to a partner while business runs as usual
 - d) initial public offering (IPO)
 - e) relocation where the firm has moved to a different jurisdiction
 - f) liquidation or bankruptcy where the firm has dissolved
 - g) other milestone event not categorised elsewhere occurred
 - h) information about milestone events is not shareable for this spin-out

- i) no major milestone occurred
- j) unknown
- 85. Column 31 (Major milestones: second milestone) captures information about whether the spin-out has experienced a significant event during the reporting year, and the nature of this milestone event. Where there has been more than one such milestone event during the reporting year, report the last chronologically in this column. Please pick one from a list of values. These are:
 - a) merger and acquisition (M&A) deal the firm has been sold to another firm.
 - b) management and employee buy-out when those already working at the firm buyout ownership
 - c) sell-out of either shares or control when the firm's owners sell their stake to a partner while business runs as usual
 - d) initial public offering (IPO)
 - e) relocation where the firm has moved to a different jurisdiction
 - f) liquidation or bankruptcy where the firm has dissolved
 - g) other milestone event not categorised elsewhere occurred
 - h) information about milestone events is not shareable for this spin-out
 - i) no major milestone occurred
 - j) unknown
- 86. Column 32 (Major milestones: additional notes) allows HE providers to offer further information about the firm beyond data points already collected. During the experimental phase of collection, analysis of these narratives may support fair comparisons and identify additional data points that would be valuable to collect, supporting the development of the collection over time. Please provide any additional information about the firm that would be helpful to:
 - a) identify the spin-out (including any previous names of the firm or registration numbers); and/or;
 - b) contextualise the spin-out's position in its development or performance (including any unique features or characteristics of the firm, in comparison to others)

This is a text string of up to 1000 characters. This column is optional. Do not return personally identifiable information in this field.

Appendix

We provide the following diagram for illustrative purposes only, to help users of the data conceptualise some of the key concepts used in the HE-BCI record.

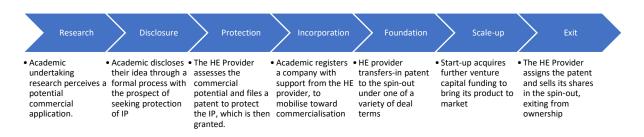


Figure 1 - Example simplified high-level spin-out journey