Executive Data Report

ASTP 2024 Annual Survey

on the European Knowledge Transfer Landscape

Financial Year 2022

Contents

Survey

The 2024 Annual European survey on Knowledge Transfer activities and outputs (FY2022 data)

ASTP is the pan-European association of Knowledge Transfer (KT) professionals, dedicated to sharing best practices and fostering the development of competencies within the KT community. A key part of this mission is conducting an annual survey of KT activities, which enhances our collective understanding of knowledge transfer resources and practices.

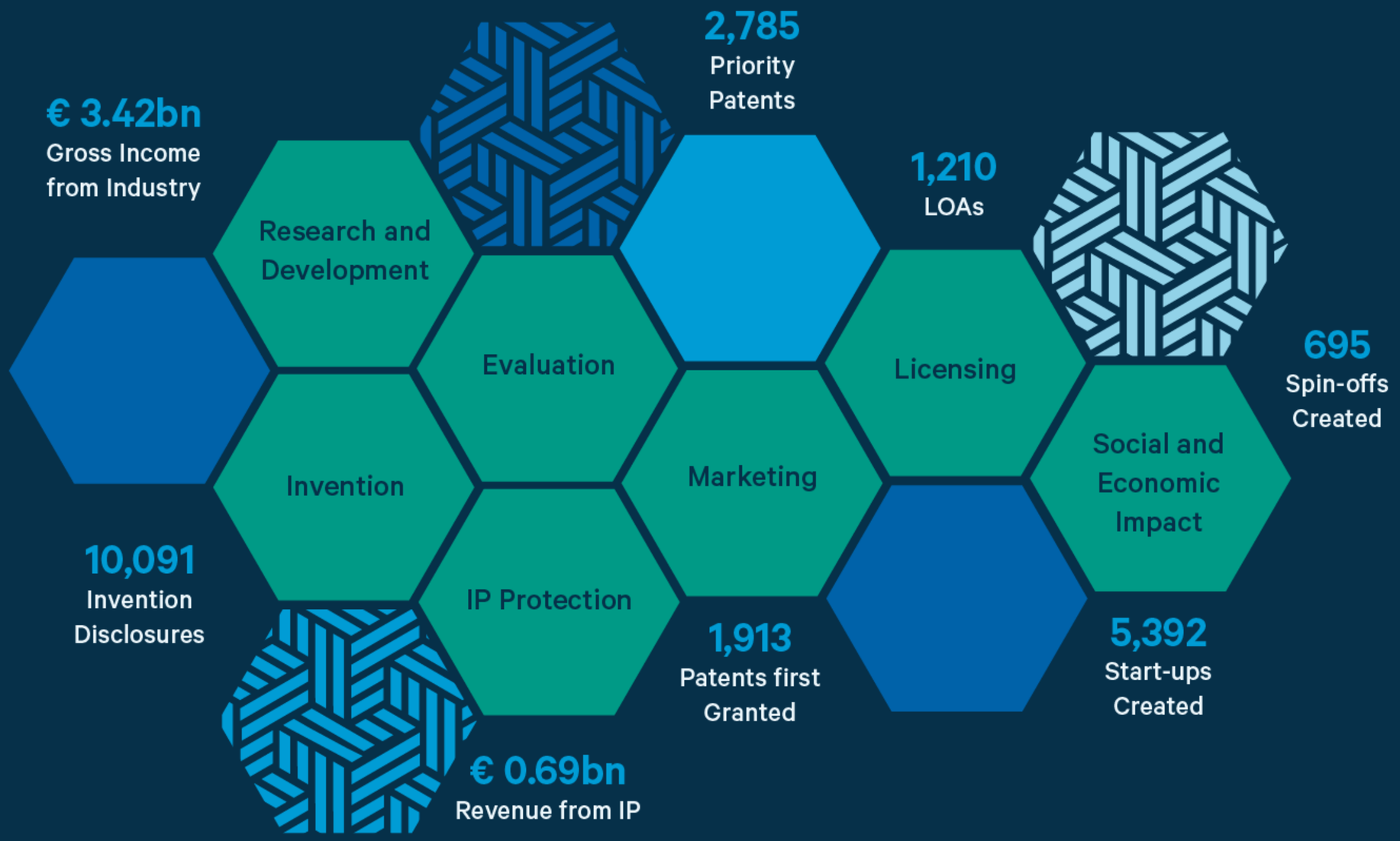
We are pleased to present the Executive Data Report from the Annual Survey, based on data provided by respondents for the 2022 Financial Year (FY2022).

This report draws on responses from 482 Knowledge Transfer Offices (KTOs) across 23 countries.

ASTP has been collecting and analysing data with strong support from collaborating National Associations (NAs). The datasets used in this report originate from two main sources:

- **KTOs that participated in the ASTP FY2022 survey, which was open from March to December 2024.** The survey was distributed to ASTP member KTOs as well as other KTOs in the ASTP database.
- **NAs that provided data from their own national surveys.** Care was taken to include only data that aligned with ASTP's survey questions and definitions. We extend our sincere thanks to Danish Universities Denmark, the French Réseau SATT, the Swiss network SWITT, our colleagues from Irish KTI, the Italian association Netval, our Spanish colleagues at RedOTRI, and UK Research England for their valuable contributions to this report.

482 responding KTOs from 23 European countries



Source: ASTP Survey Report on Knowledge Transfer Activities in Europe for Financial Year 2022

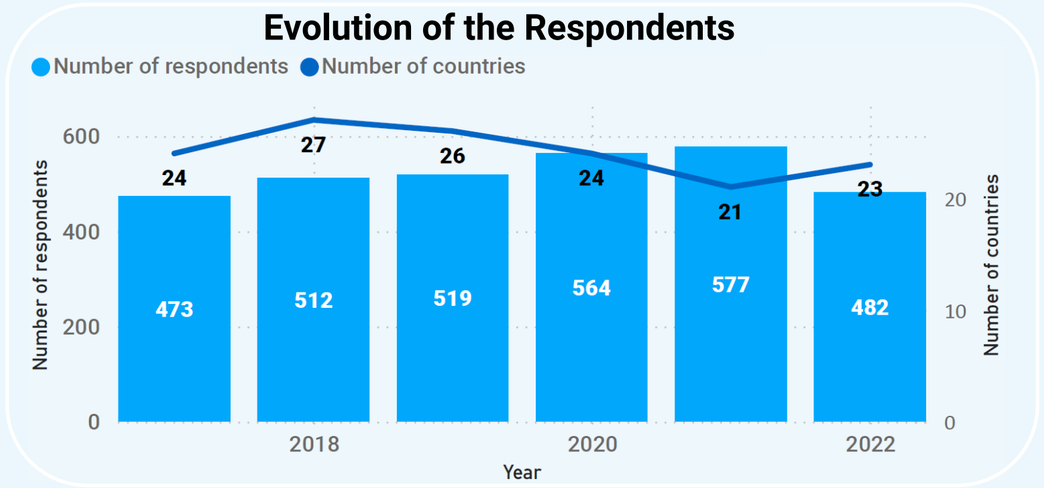
Information on Responding KTOs

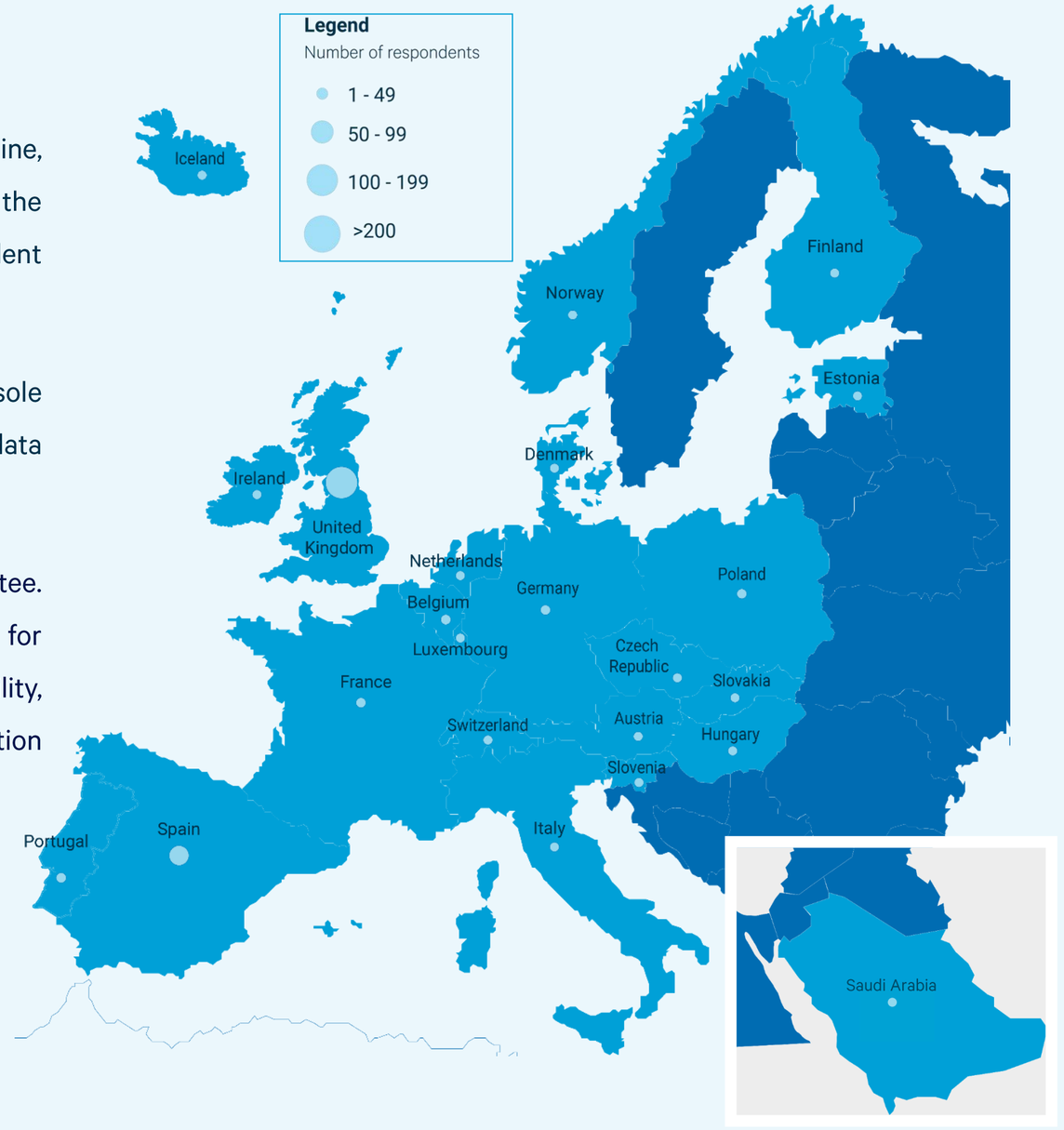
FY 2022 Survey Sample

Following several years of steady growth in the total number of responses, FY2022 saw a notable decline, despite an increase in the geographical diversity of respondents. This drop is primarily due to the absence of large national datasets, as some National Associations (NAs) did not conduct independent surveys for FY2022 and instead encouraged their members to respond directly to the ASTP survey.

The variability in the number of participating countries is partly explained by certain KTOs being the sole respondents from their respective countries, without participating on a regular basis. Nonetheless, data has been consistently collected from 19 countries each year over the past six years.

Data quality – A rigorous data cleaning protocol is applied by the ASTP Metrics & Impact Committee. This includes, where feasible, cross-checking with respondents when outliers are identified, either for correction or confirmation. In empirical datasets, missing values may occur due to data unavailability, confidentiality concerns, or incompatibility. The total number of respondents for each question (indicated as 'n') may vary and is specified in each corresponding graph.

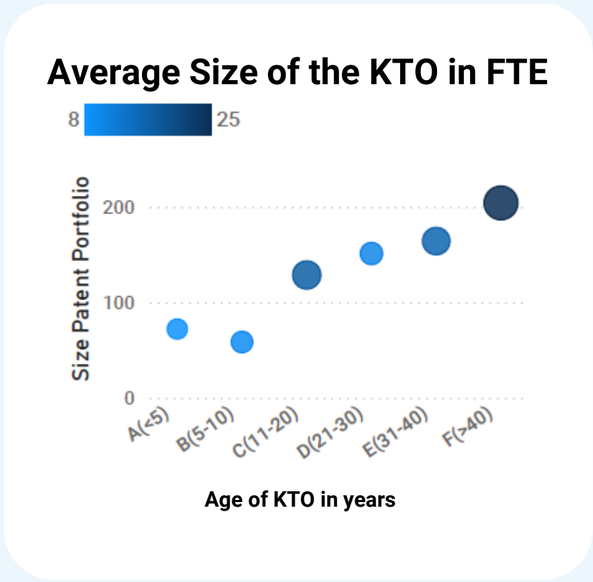


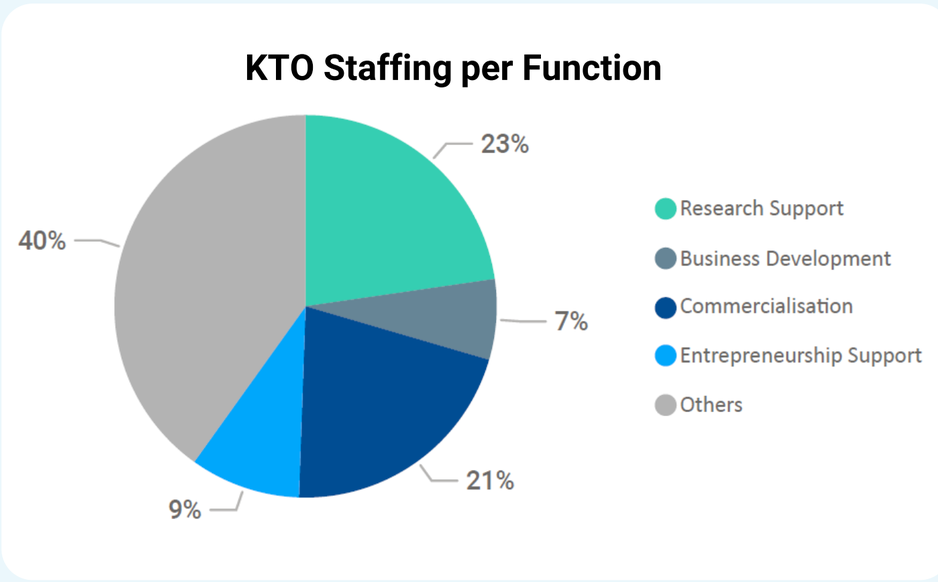


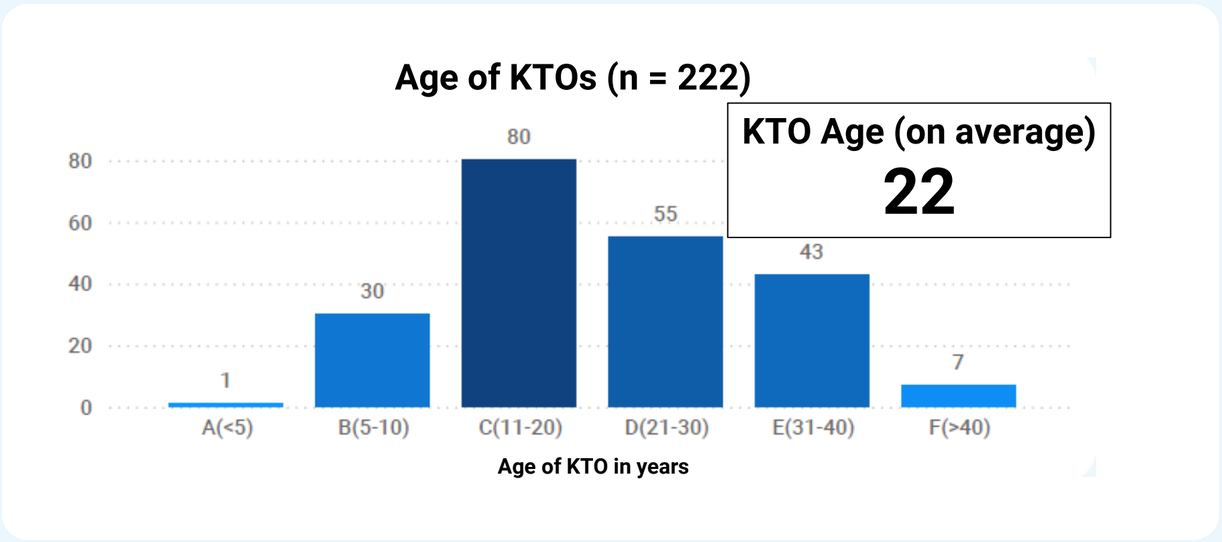
Profile of Responding KTOs

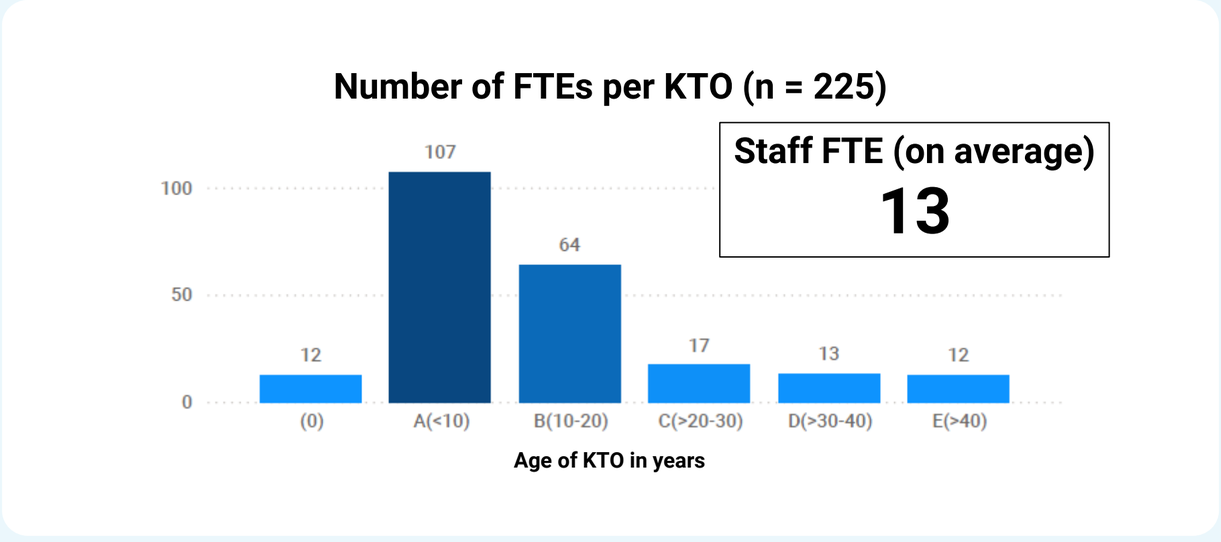
KTOs had an average size of 13 FTEs, and the most represented age group was those between 11 and 20 years old. These KTOs tend to have a relatively mature and sizable patent portfolios. However, the age group with the most substantial portfolios is those over 40 years old, with an average of 25 FTEs.

In 2022, KTO staffing by function was almost evenly split between *Research Support* and *Commercialisation*. Notably, the *'Other'* category also accounted for a significant share of staffing across KTO functions.









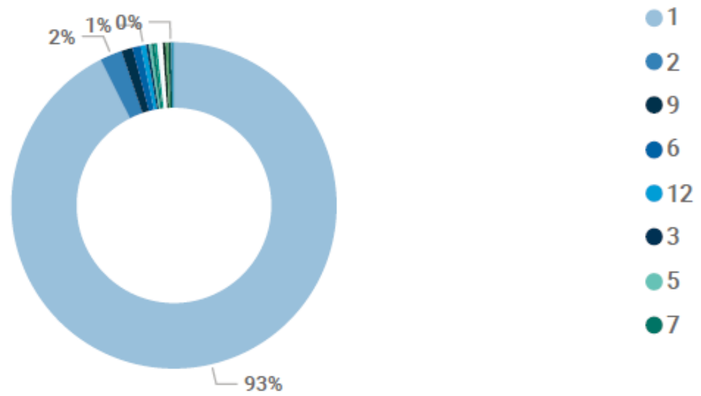
PROs Served

As shown in the pie chart, most KTOs serve a single PRO. Only a small minority (7%) operate on behalf of two or more research institutions, with 2% serving exactly two PROs.

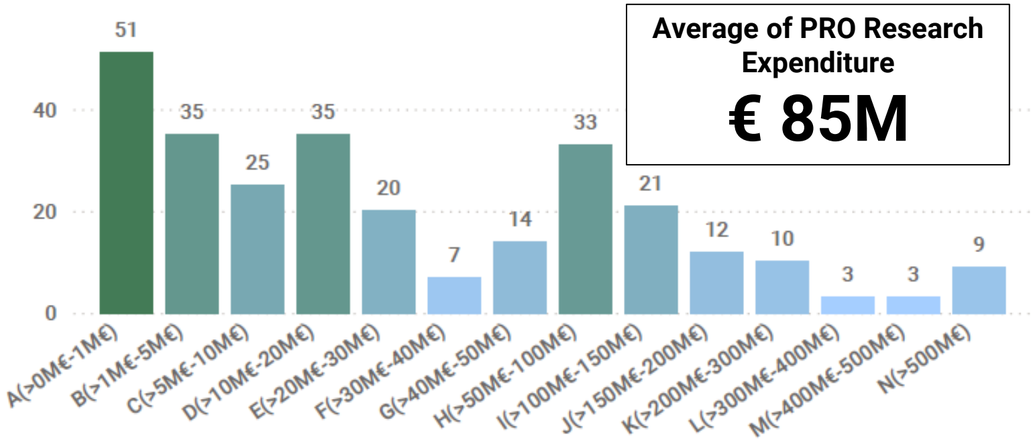
To normalise for organisation size and enable analysis on the metrics, we asked KTOs to provide two indicators for the PROs that they serve: the PROs' Research Expenditure and Research Effort, expressed in full-time equivalents (FTEs), including cumulative data from KTOs serving multiple PROs.

Among the respondents, the average PRO research expenditure is €85 million, and the average research effort is approximately 1,278 FTEs.

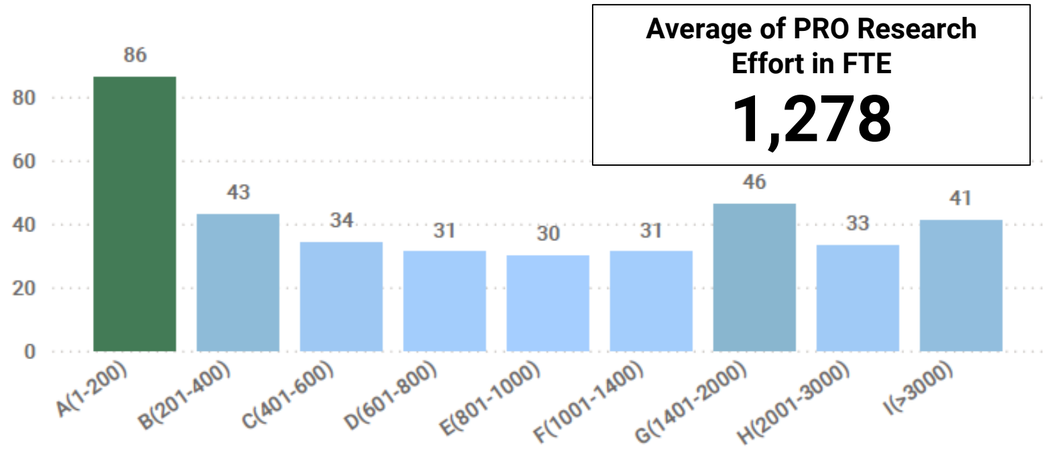
Number of PROs Served by a KTO (n = 364)



PRO Research Expenditure (n = 354)



PRO Research Effort in FTE (n = 386)



Industry Collaborations

Number of Agreements and Income

European KTOs responding to the survey reported a combined total of 130,574 agreements with industry concluded in FY2022. A breakdown of these agreements by type, along with the number of respondents, is provided in the first table on the right.

Consultancy agreements emerged as the most frequent form of engagement between academia and industry.

The second table presents a detailed breakdown of the €3.4 billion in income generated in FY2022 from active industry agreements. Notably, income from consultancy agreements was significantly lower compared to other types of industry collaboration.

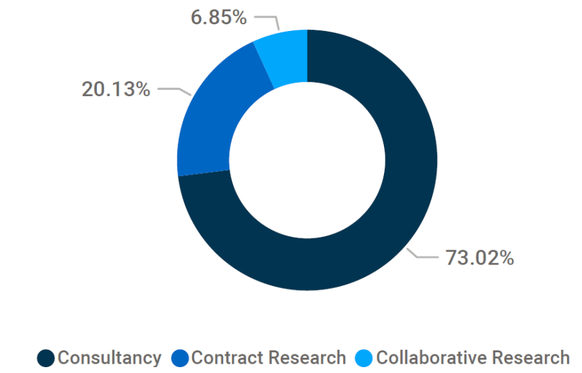
When focusing only on KTOs that reported non-zero values for all three agreement types (85 KTOs for newly signed agreements and 59 for income) collaborative agreements accounted for nearly 7% of total contracts but generated approximately 50% of the total income from industry agreements.

Contract research collaborations represented 20% of newly signed agreements and contributed 37% of the total income, while consultancy agreements made up 73% of the newly signed agreements but generated only about 13% of the income.

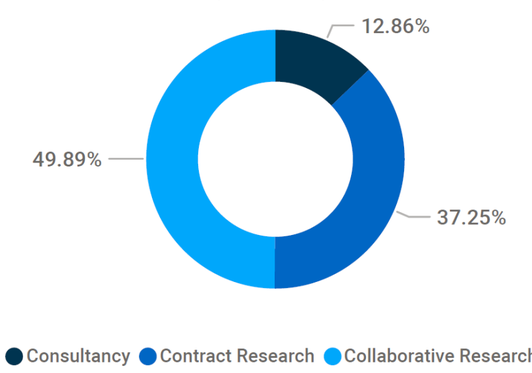
Year	Number of Collaborative Research Agreements	Collaborative Research Agreements (n=)	Number of Contract Research Agreements	Contract Research Agreements (n=)	Number of Consultancy Agreements	Consultancy Agreements (n=)
2022	8,945	122	26,281	315	95,348	326

Year	Income from Collaborative Research Agreements	Collaborative Research Agreements (n=)	Income from Contract Research Agreements	Contract Research Agreements (n=)	Income from Consultancy Agreements	Consultancy Agreements (n=)
2022	€ 1,706,142,344	92	€ 1,273,878,442	314	€ 439,617,071	308

Number of New Industry Agreements (n = 85)



Income from Industry Agreements (n = 59)



New Agreements by Type

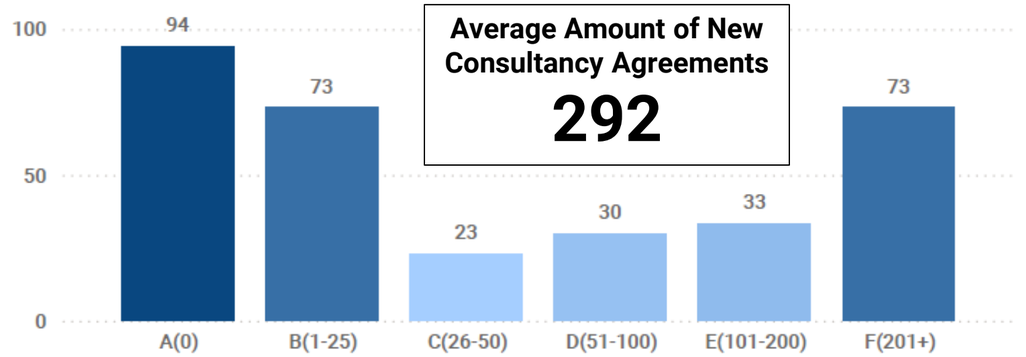
The graphs in this section provide a more detailed view of the distribution of new contracts concluded per KTO.

Approximately 70% of KTOs concluded at least one new agreement during FY2022 (data not shown), with 84% reporting at least one Collaborative Agreement, 71% at least one Consultancy Agreement, and 70% at least one Contract Research Agreement.

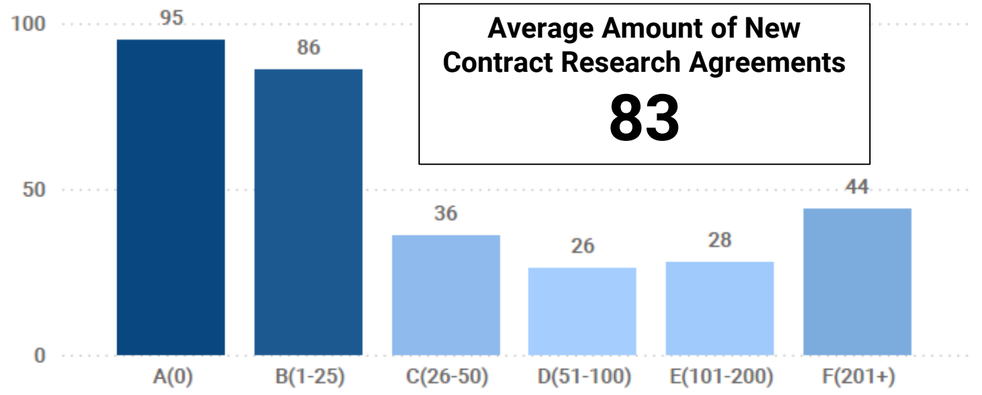
Among those who responded for each agreement type:

- 58% of KTOs signed 50 or fewer new Consultancy Agreements.
- 68% signed 50 or fewer Contract Research Agreements.
- 73% signed 50 or fewer Collaborative Research Agreements.

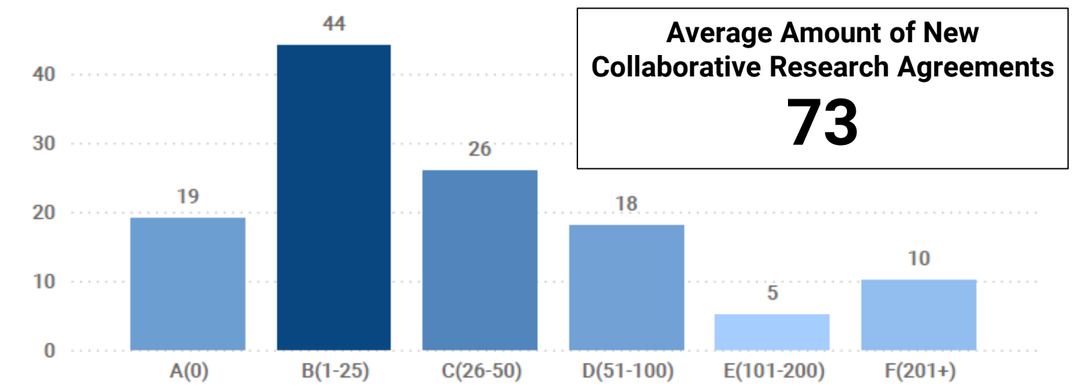
Number of New Consultancy Agreements (n = 326)



Number of New Contract Research Agreements (n = 315)



Number of New Collaborative Research Agreements (n = 122)

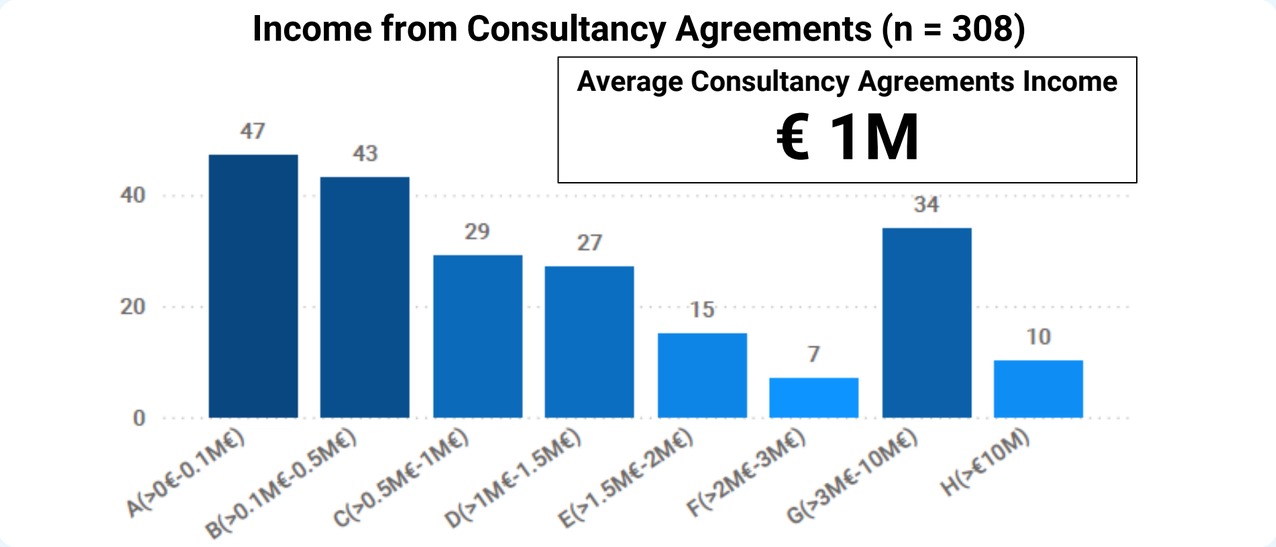


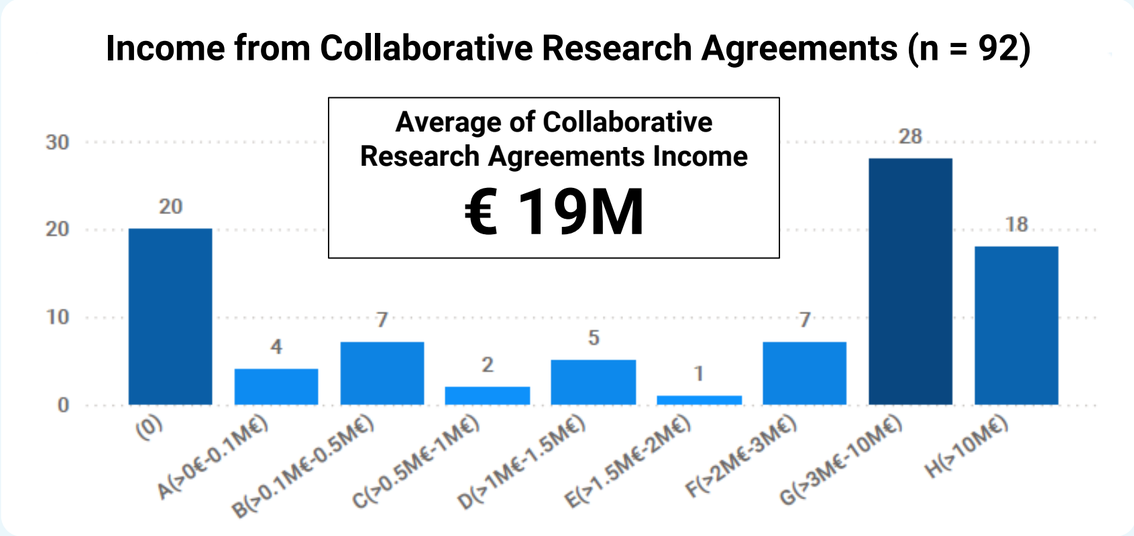
Income from Agreements by Type

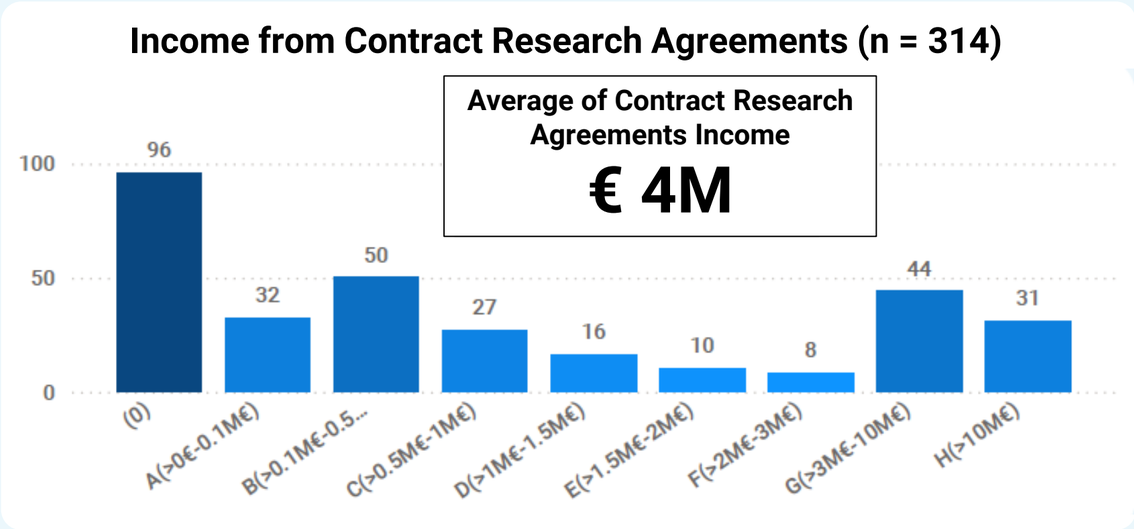
This page provides an overview of the income distribution across different types of industry agreements.

The data show that collaborative research agreements are the primary source of industry revenue for most KTOs; 47% of KTOs reported over €2 million in income from collaborative research, compared to 26% from contract research agreements, and 18% from consultancy agreements.

A key observation is that the high total income from contract research (€1.274 billion) is largely concentrated among a small group of KTOs. Specifically, 10% of respondents generated more than €10 million each from contract research, accounting for 73% (€925 million) of the total income in this category.







IP Management and Commercialisation

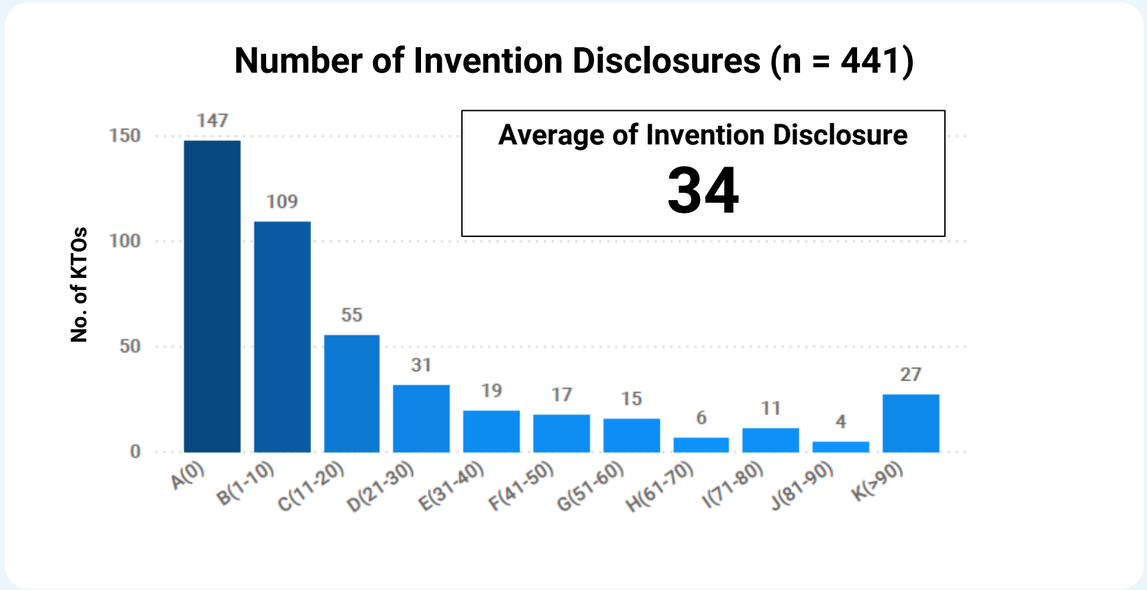
IP Resources

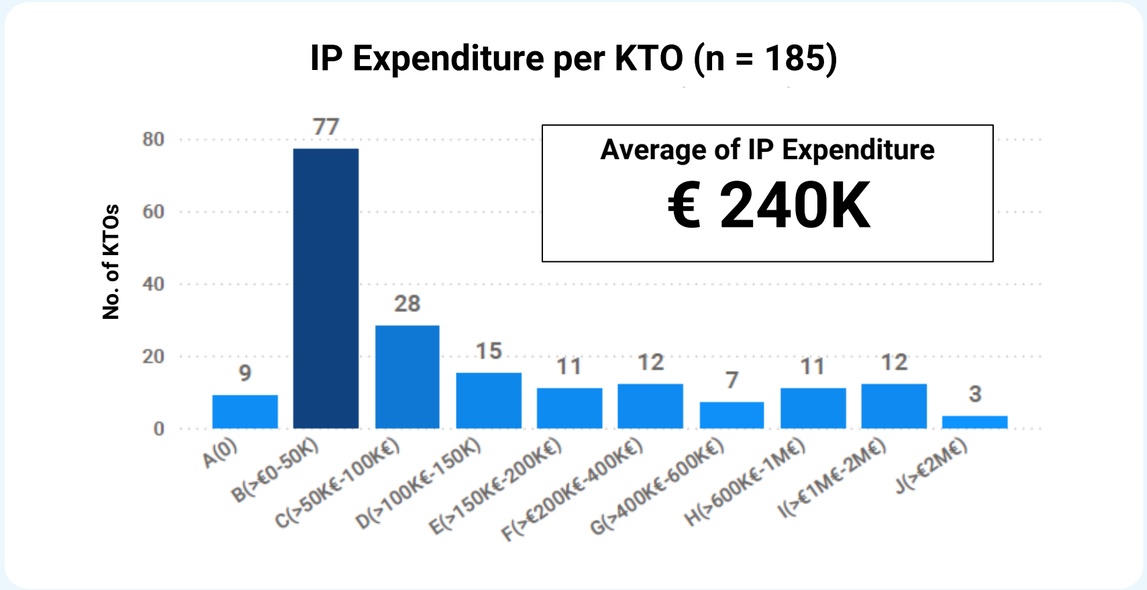
IP management is a core activity of KTOs, serving as the foundation for the commercialisation of research results. The first step in this process is identifying potential results to valorise, which is captured through “invention disclosures”—the raw pipeline from which KTOs develop valorisable assets.

Considering only responses greater than zero, the average number of invention disclosures per KTO is 34.

The amount spent by KTOs (and/or their PROs) on IP protection provides insight into their IP management activities. The graph below shows that 43% of offices spent up to €50,000 on IP protection in FY2022.

When comparing KTO staff FTEs to the number of invention disclosures, we observe an average of 3 invention disclosures per FTE. Compared to the previous period (FY2021), there was an increase of over 50% in the average number of invention disclosures and a 68% rise in average IP expenditure.



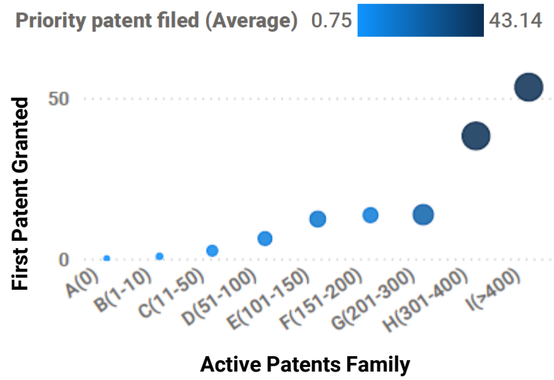


IP Portfolio

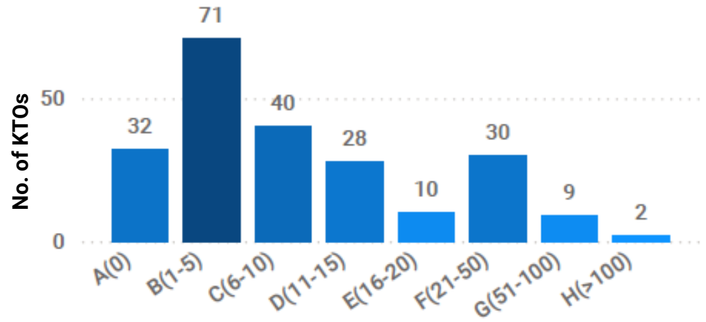
To avoid redundancy and provide a comprehensive overview of the IP patent portfolio, three additional metrics are used alongside the number of invention disclosures: the number of priority patent applications, the number of first patents granted, and the number of active patent families, all grouped by portfolio size for 2022.

The largest group of responding KTOs reported filing 1–5 new priority applications, receiving 1–5 first patents granted in 2022, and managing 11–50 active patent families.

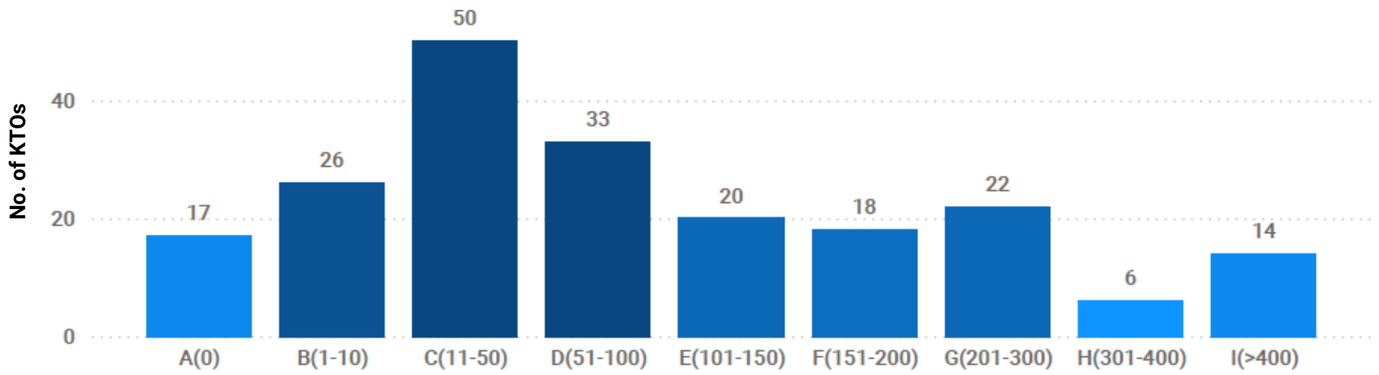
Priority Patent Filed



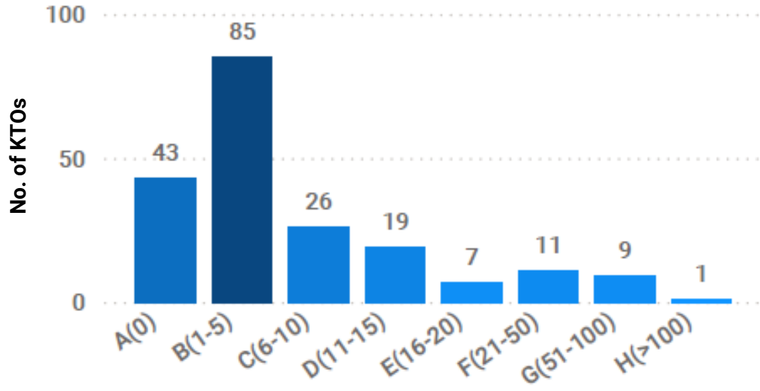
Number of Priority Patent Applications Filed (n = 222)



Number of Active Patents Families (n = 206)



Number of First Patent Granted (n = 201)



IP Commercialisation Agreements | LOA

License agreements are the most common form of IP commercialisation, as shown in the tables. In addition to licenses, agreements involving the transfer of asset ownership (assignments) and option agreements are also used, though less frequently.

The survey collects detailed data on licenses, including those for software and research materials, alongside the more traditional licenses for patented IP. Research material licenses allow the use of IP without necessarily leading directly to new products in development or on the market.

The relatively high number of software licenses reflects the nature of software, which can be easily licensed to multiple licensees, often through non-exclusive end-user licenses.

The two graphs below display the total number and percentage of patent families licensed or optioned per KTO by the end of FY2022, representing cumulative licensing activity up to that point—not just activity conducted during 2022.

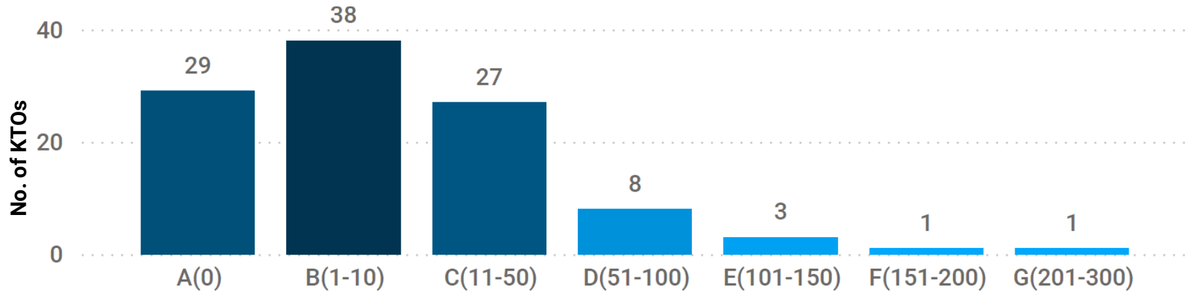
Type of Commercial Contracts

Year	Options	Options (n=)	Assignments	Assignements (n=)	Licenses	Licenses (n=)	Total of Contracts
2022	65	92	183	92	962	388	1210

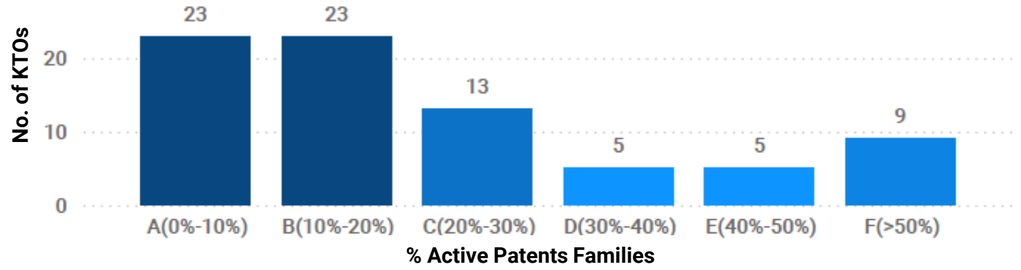
License Agreements

Year	Patent Licenses	Patent Licenses (n=)	Material Licenses	Material Licenses (n=)	Software Licenses	Software Licenses (n=)	Other Licenses	Other Licenses (n=)	Total License Agreements
2022	310	107	196	83	267	108	189	90	962

Number of Active Patents Families Licensed or Optioned (n = 107)



% of Licensed or Optioned Active Patents Families per KTO (n = 107)



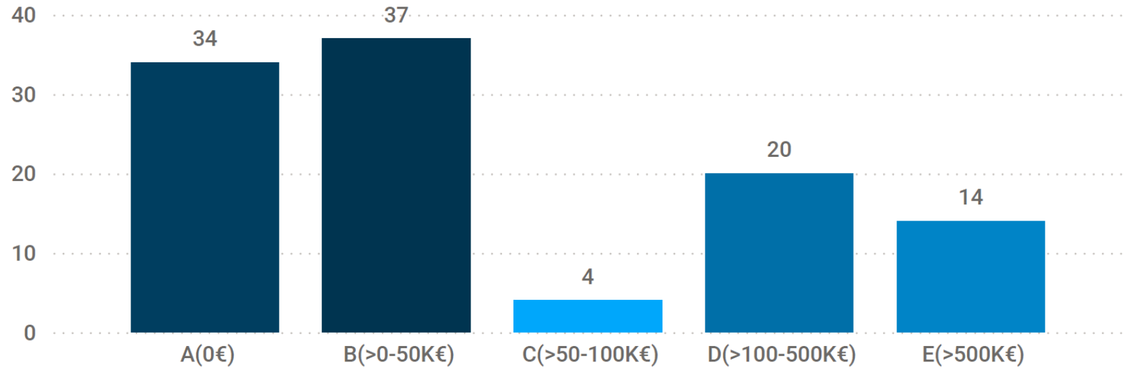
Commercial Revenue from IP

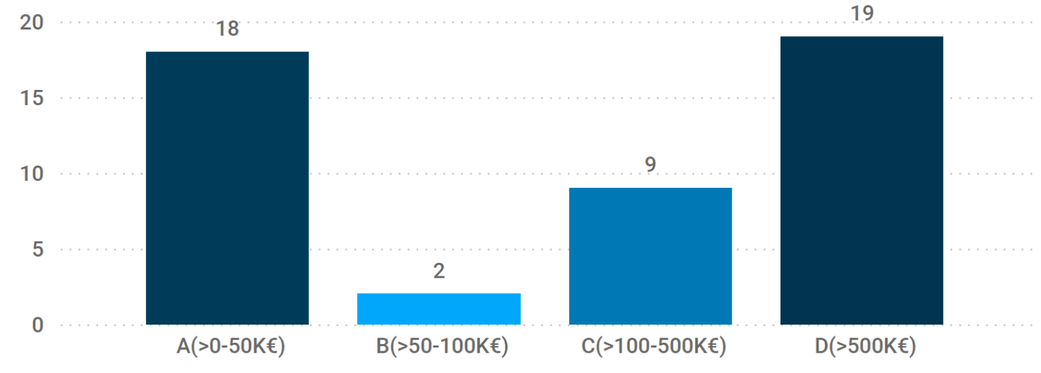
An aggregate total of €693 million in commercial revenues from IP was reported for FY2022 by 394 respondents.

Among the KTOs reporting on the "Cash-Equity" metric, only 48 reported revenue from cash-in equity, while 264 reported no revenue from this source.

Of the 109 KTOs providing data on patent license revenues, 75 reported positive revenues, 34 reported zero revenue, and an additional 374 (data not shown) reported no revenue.

Year	Commercial revenue from IP	Commercial revenue from IP (n=)	Gross revenues coming from patent licenses	Gross revenues from patent licenses (n=)	Gross revenues from cash-in equity	Gross revenues from cash-in equity (n=)
2022	€ 693,174,273	394	€ 209,951,996	109	€ 113,522,161	312





New Business Creation

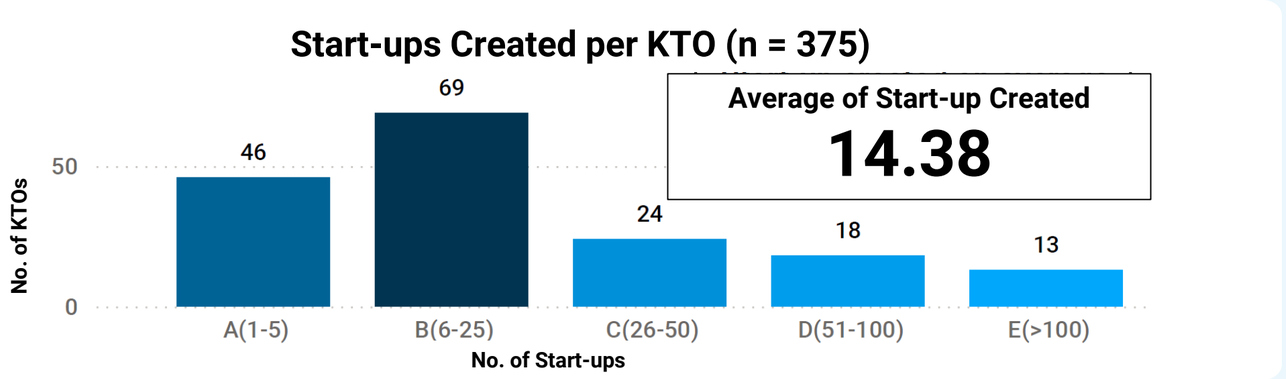
Spin-offs and Start-ups

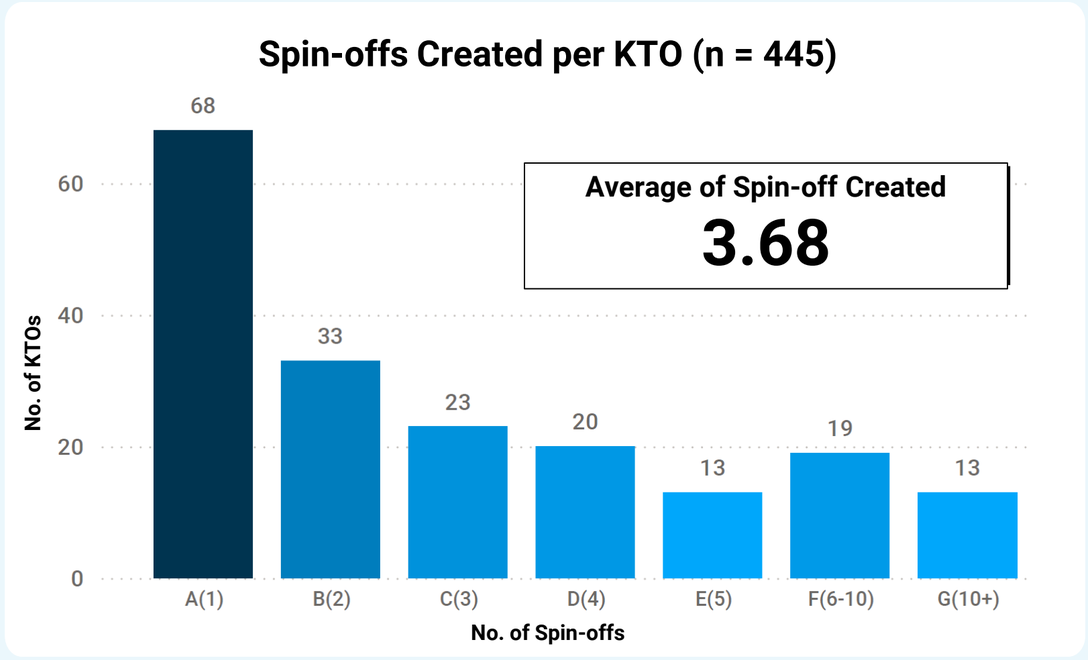
The graph on the right shows that a majority (57%) of responding KTOs did not create any spin-offs. Similarly, more than half (55%) did not create any start-ups (see graph below).

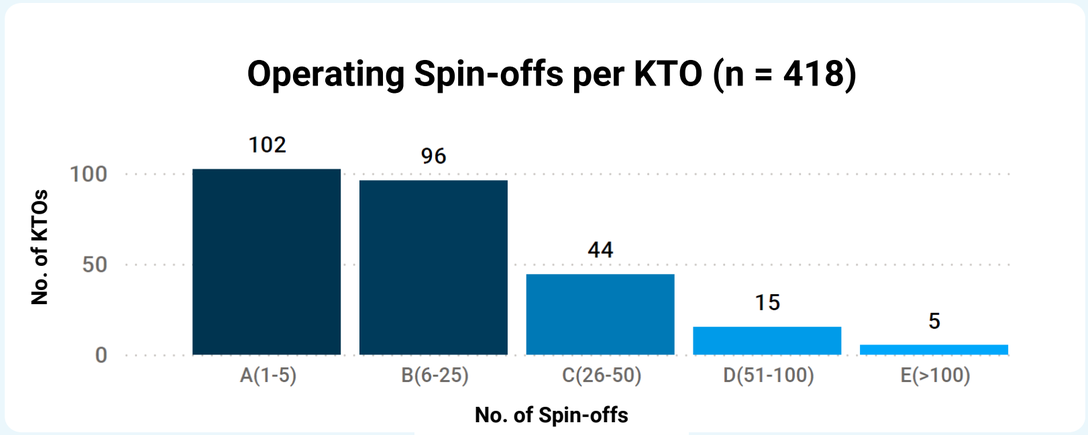
Collecting data on the legacy of earlier spin-offs—such as how many are still operating (third graph)—provides a snapshot of their potential impact on the local economy. However, KTOs often face challenges in gathering this information, especially for companies that may have relocated or whose ties to the PRO have ended.

Note: In the graphs, the difference between the total number of responses (n-value) and the sum of the numbers shown above the bars corresponds to the count of zero-value answers.

Year	Spin-offs created	Spin-offs created (n=)	Operating spin-offs	Operating spin-offs (n=)	Staff (FTE) in operating spin-offs	Staff (FTE) in operating spin-offs (n=)	Start-ups created	Start-ups created (n=)
2022	695	445	4982	418	43,885	279	5,392	375







References

List of abbreviations

Abbreviation	Meaning
FTE	Full Time Equivalent
FY	Fiscal Year
IP	Intellectual Property
LOA	Licenses, Options, Assignments
KT	Knowledge Transfer
KTO	Knowledge Transfer Office
PRO	Public Research Organisation

KT Metrics Data

KT Metrics 2014 - 2022:
https://bit.ly/astpktmetrics

The questionnaire that enables the collection of data presented in this report is present on this page:
https://bit.ly//KTsurveyFY2021

References

Glossary

Term	Definition
Collaborative Research	Research performed by at least one PRO and at least one non-academic party, where all parties contribute to the design of the research project, its implementation and share the project outputs. Include all collaboration agreements involving non-academic organisation, including those under which the non-academic party does not make any cash payment to the PRO directly (e.g. in case the project is fully subsidised).
Consultancy	The provision of expert advice in a specific field by academics working in a PRO for the benefit of an external, non-academic organisation. Exclude consultancy agreements concluded by individual staff members directly with third parties (i.e. not through the PRO) or those that relate to research or technical services, testing of equipment and the like.
Contract Research	Research performed by a PRO at the request of and paid for by a non-academic organisation, using existing knowledge, know-how, materials, equipment and other resources available at the PRO.
Spin-off	A company expressly established to develop or exploit IP created by a PRO and with a formal contractual relationship. Include, but do not limit to, spin-offs established by PRO staff. Exclude companies that have no formal agreement for commercially developing IP or know-how created by the institution.
Start-up	A newly registered company that is founded by PRO students or employees but that is not directly involved with the exploitation of intellectual property generated within that PRO.

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ASTP Survey

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Citation: ©ASTP 2025 Annual Survey - Executive Data Report on Financial Year 2022

Become Involved

Take part in the current survey on FY2023

Respond here: https://bit.ly/ASTPKTSurveyFY2023

Citation: ©ASTP 2025 Annual Survey - Executive Data Report on Financial Year 2022