

WIPO resources supporting TISCs and TTOs

As TISC and TTO networks expand and provide more services to local innovators, WIPO continues to support them with knowledge and learning resources as well as effective management resources.

WIPO has developed a range of initiatives and resources to empower TISCs and technology transfer structures. These include public-private partnerships to facilitate access to technological information; the [WIPO INSPIRE](#) open digital knowledge center, which provides researchers and innovators with access to a unique blend of information and knowledge in the area of IP and innovation, in particular on patent databases, patent registers, patent analytics, technology transfer and institutional IP policies; and dedicated training activities and publications in these areas.

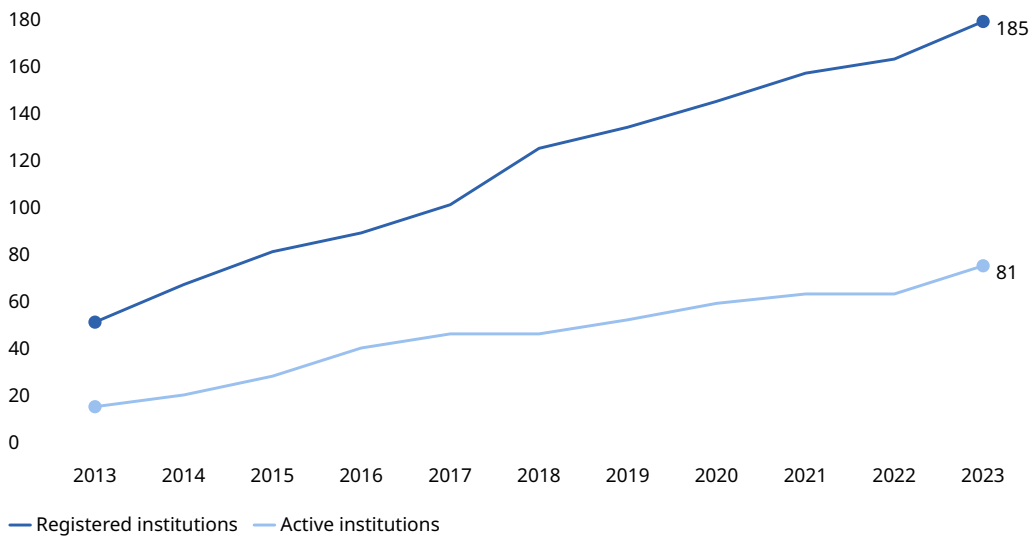
The [IP and technology transfer webpage](#), accessible through WIPO INSPIRE, also offers a unique reference point for information on technology transfer and institutional IP policies and provides access to the [WIPO database of institutional IP policies](#), with links to existing IP and related policies (such as [policies on consulting](#), [copyright](#), [conflict of interest](#), [software](#), [open access](#) and [spinoffs](#)) of universities and research institutions worldwide.

Digital platforms and tools for access to information and knowledge

Access to Specialized Patent Information (ASPI)

ASPI facilitates free or low-cost access for academic and research institutions in developing countries to commercial patent database services that offer advanced tools and services for retrieving and analyzing patent data. It is made possible through a unique public-private partnership with nine leading patent database providers.

The ASPI registration rate has been steady in recent years, with a notable increase in 2023. There has been a significant improvement in the user administration and communication processes due to the assignment of dedicated personnel.

Figure 5. Number of registered and active institutions in ASPI

Source: ASPI database

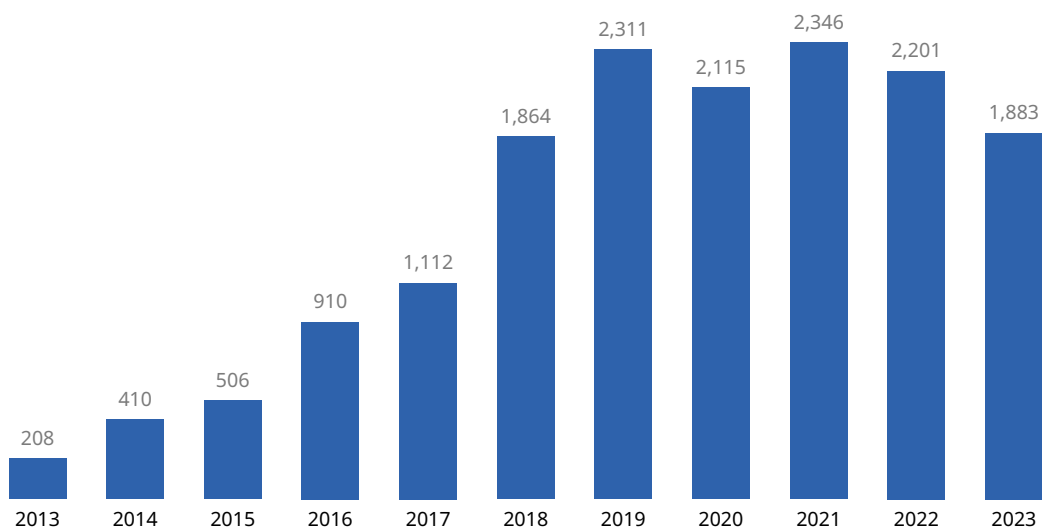
Access to Research for Development and Innovation (ARDI)

Through a partnership with the publishing industry, ARDI strives to bridge the knowledge gap by increasing the availability of scientific and technical information for eligible institutions in developing countries. ARDI facilitates free or low-cost access for academic and research institutions in developing countries to over 60,000 resources including peer-reviewed journals, books and other information publications in diverse fields of science and technology.

The program is also part of Research4Life, a partnership of five United Nations agencies, private-sector enterprises, non-governmental organizations and academic institutions.

Research4Life provides researchers in 125 developing countries and least developed countries with free or low-cost access to up to 203,000 journals, books and other information resources in the fields of health, food and agriculture, the environment, applied sciences, law and social sciences. More than 11,000 institutions are currently registered with Research4Life.

A consistent growth in the availability of open access publications through different sources and platforms has resulted in a noticeable fluctuation in the number of ARDI logins in recent years.

Figure 6. Number of ARDI logins

Source: Research4Life

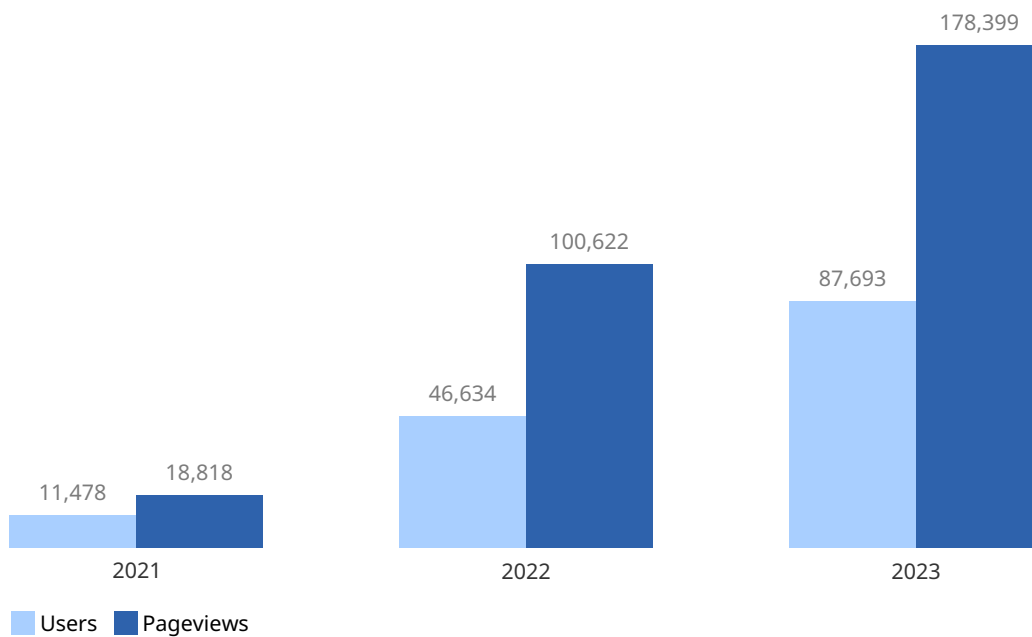
WIPO INSPIRE

WIPO INSPIRE is a global knowledge platform to assist innovators, entrepreneurs, patent professionals, TISCs and TTOs in their innovation support activities.

It is a one-stop platform that provides a unique blend of information and knowledge on patent databases, patent registers, patent analytics, technology transfer and institutional IP policies, combining reference data with expert insights into resources, tools and good practice recommendations.

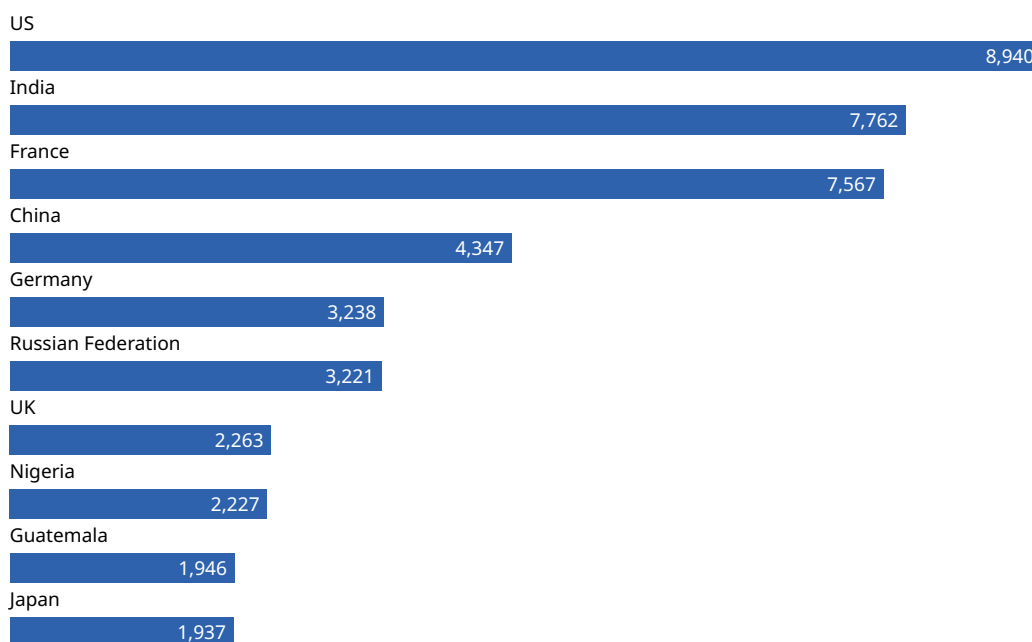
WIPO INSPIRE was accessed by over 87,000 users in 2023, compared to 46,634 users in 2022, representing an 88 percent increase in use.

Figure 7. WIPO INSPIRE use



Source: WIPO Web Analytics

Figure 8. Top 10 countries with the highest number of visitors to WIPO INSPIRE in 2023



Source: WIPO Web Analytics

Patent database reports

The patent database reports portal within WIPO INSPIRE provides access to the reports on national and commercial patent databases and their features. Innovators, researchers and patent professionals can find clear, accurate and unbiased information about patent databases and assess which database is best for their needs. In 2023, there were 46 detailed reports on the content and features of a wide range of patent databases. These reports were accessed by 38,640 users.

Patent registers

The Patent Register Portal in WIPO INSPIRE is an interactive directory of online patent registers and gazettes to guide users to relevant sources of legal status information when researching the validity of a patent. As a gateway to legal status-related information from over 200 jurisdictions and patent information collections, the Patent Register Portal contains a searchable map and table as well as detailed jurisdiction files with useful legal-status-related information and search tips. The jurisdictions files and associated links to nation online registers and gazettes have been revised and updated in 2023. The portal was accessed by over 11,000 users.

Patent analytics

WIPO INSPIRE also offers a reference point for access to patent analytics resources, in particular PLRs and WIPO Technology Trends (WITT) reports, which track the development of technologies through the analysis of data on innovation activities that help inform policy discussions, strategic research planning and technology transfer.

Through the platform, users can access 18 PLRs prepared by WIPO and 265 PLRs prepared by other organizations, as well as the WITT reports on artificial intelligence (AI) and assistive technology, which were downloaded more than 193,000 times between 2019 and the end of December 2023.

Technology transfer and institutional IP policies

Specific activities and resources on technology transfer and institutional IP policies are accessible through WIPO INSPIRE on a dedicated IP and technology transfer webpage, which serves as the primary repository for information and resources in these areas.

eTISC

Through WIPO INSPIRE, users can access eTISC, a virtual knowledge-sharing platform that provides a dedicated space for the TISC community and IP professionals to interact and share knowledge and ideas.

Main features of the platform include:

- “Ask the Expert” sessions for interacting with experts in fields such as patent information and technology transfer;
- Group and forum discussions for sharing knowledge and experiences; and
- News and events to help users stay up to date with the latest IP information.

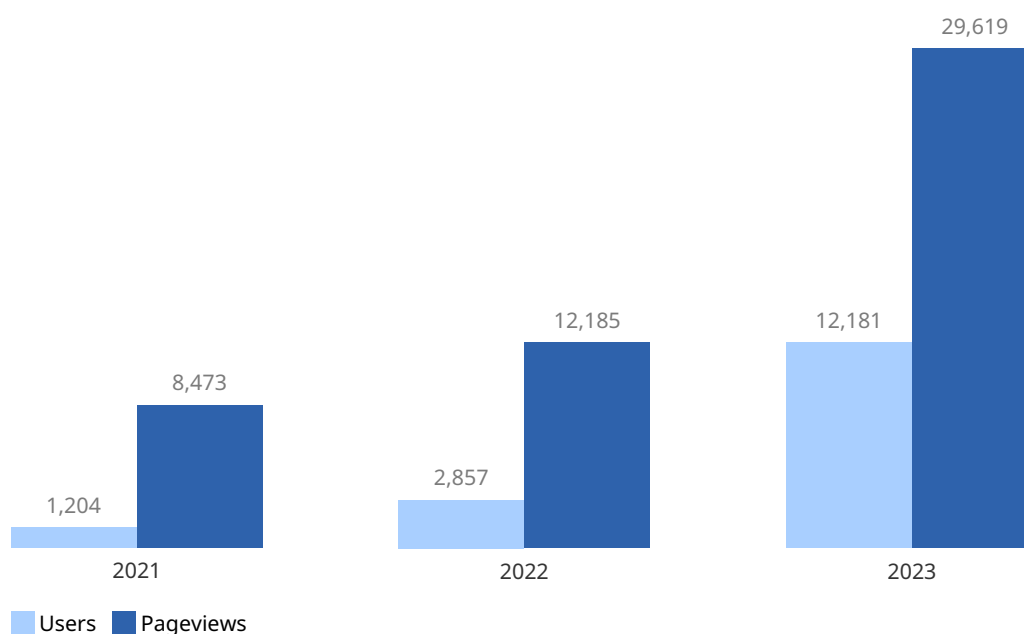
2023 saw a substantial increase in eTISC platform use, due to new activities and news items and articles being added to the platform. The thematic webinar series and Ask the Expert discussions continued in 2023, with the theme being “IP and Life Sciences.” Topics covered included: Pathway to Licensing Patents: A Step-by-Step Overview of Agreements; Patenting and Disclosure Requirements of Healthcare Innovations; Inventing in Collaboration: The Allocation of Patent Ownership in R&D Partnerships; and Deal Structuring: Negotiating IP Terms in Development Agreements. The webinar series brought together many individuals including IP professionals, researchers, students and entrepreneurs, among others.

The eTISC platform was also used to facilitate the sharing of knowledge and resources and to strengthen networking among participants of various capacity-building and training activities, such as participants in the on-the-job training in the SADC region, technology transfer

professionals who participated in the accelerated life sciences innovation regional conferences in Mexico and the Philippines, and TISC staff from Malaysia and the Philippines who followed the pilot training on the toolkit on new product development and inventions in the public domain.

In 2023, eTISC was accessed by 12,181 users; a significant increase compared to previous years.

Figure 9. eTISC use



Source: WIPO Web Analytics

TISC Project and Performance Management Platform (TPPM)

Launched by WIPO in 2022, the platform was developed to support the growing global TISC network in managing national TISC networks more effectively. The platform was designed especially to help TISC coordinators manage their national projects, and coordinate, evaluate and report on their activities. After being piloted in six countries in 2022, the platform was rolled out to eight additional countries in 2023. The feedback collected from the pilot countries is being used to further improve the platform before rolling it out globally.

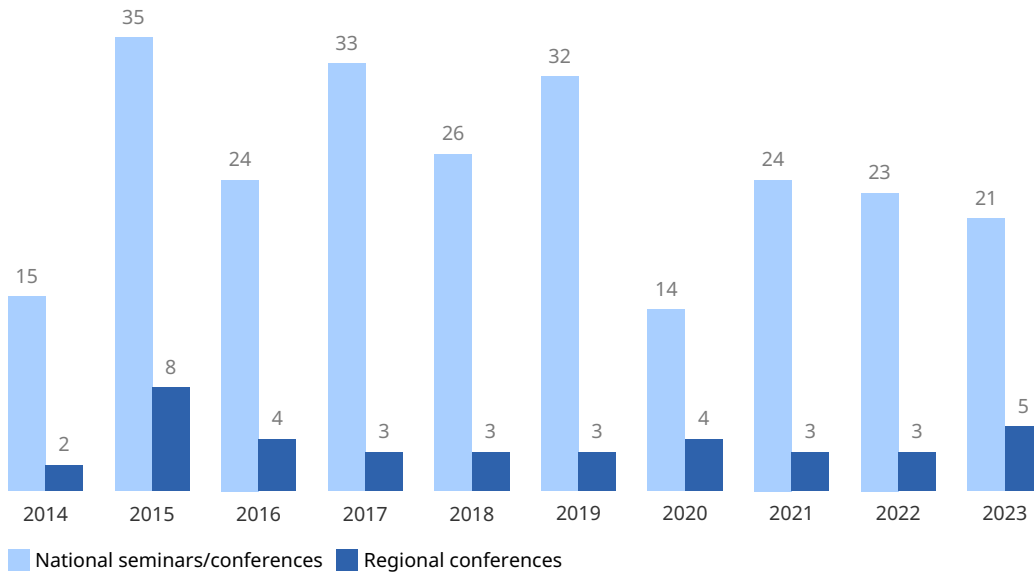
Training to expand knowledge and skills

To increase the capacities, knowledge and skills within TISCs and technology transfer structures, WIPO provides training through onsite and online workshops, WIPO Academy distance learning courses and specialized learning resources on patent searches, including state-of-the-art, novelty and freedom-to-operate searches, patent analytics and technology transfer.

In the area of technology transfer, IP management and IP commercialization, training programs focus on the development of human capital regarding pillars of the innovation ecosystem, such as institutional IP policies, the establishment and management of technology transfer structures, and capacity building in IP marketing, licensing and valuation.

National and regional training for TISCs

To support TISCs in developing the technical skills needed to provide high-quality innovation support services to local innovators, 21 workshops were organized for national TISC networks, and five Regional Meetings were organized for ARIPO, ASEAN and OAPI member states and for certain TISC networks in the Arab region and in Asia.

Figure 10. Number of national and regional conferences organized for TISCs

Source: WIPO IPID, 2023

To increase the standardization of TISC operations, raise the quality of services across TISCs and improve career development pathways for TISC staff, a WIPO TISC staff certification program, which aims to establish a curriculum-based professional certification for TISC staff, was developed. The first pilot session of the TISC Foundation Course was launched with 48 participants from six countries (China, Kenya, Madagascar, Peru, Philippines and Saudi Arabia). The course includes three phases: a distance learning phase, an instructor-led training course, and practical on-the-job experience in providing TISC services. This first pilot run will continue in 2024 before being rolled out to all TISC networks.

Training on technology transfer and IP commercialization

Eight training sessions were also organized specifically for technology transfer structures in six member states of the Eurasian Patent Organization (EAPO) – Belarus, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan and Turkmenistan – as well as in Colombia, Egypt, Mexico and Philippines, to enhance the knowledge of researchers, TTO staff and managers in these countries on different aspects of technology transfer and IP commercialization. Hands-on training sessions were also organized on the practical application of IP valuation methods in different contexts (licensing, valuation of equities, litigation) for specific sectors (biotechnology and pharma, agroindustry) and regions, such as for member states of ASEAN to reinforce the capacity of innovation stakeholders to recognize risks and opportunities in technology transfer negotiations and to be able to value their intangible assets.

In the SADC region, a pioneering program was launched to provide on-the-job training in technology transfer to 12 selected practitioners from Botswana, Malawi, Namibia, Zambia, and Zimbabwe, with an eight-week experience in South Africa. [\(See the Special Feature of this report for more on this initiative.\)](#)



Photo: William Mulders

Lien Verbauwheide Koglin (Counsellor, IPID, WIPO) with Chrispin Kaphaika (Lilongwe University of Agriculture and Natural Resources) and Livison Msonthe (Malawi University of Business and Applied Sciences), participants from Malawi in the on-the-job-training, at University of Cape Town

“It was just one of the best trainings ever. The skills that I have acquired, I didn’t have them before. The networks that I have established, I didn’t have them before.”

Livison Msonthe

Malawi University of Business and Applied Sciences

In the ASEAN region, WIPO launched two regional projects – the first related to IP valuation, and the second on the development of a regional IP policy model for academic institutions (see below) to contribute to the development of TISCs and other technology transfer structure services and support, and to support ASEAN member states to achieve the objectives as defined in the ASEAN IPR Action Plan 2016–2025. Both projects are supported by the Japan Industrial Property Global Funds-In-Trust and have been implemented in close collaboration with ASEC as well as national IP offices and other relevant government institutions, academic and research institutions, practitioners, industries and financial communities, with the support of regional and international experts. The ASEAN IP valuation project aims to assess current regional practices and to provide complementary specialized resources in the form of an IP valuation toolkit containing a set of regionally agreed leading principles and practices that will enable the creation of more transparent IP market relations and an environment of trust in IP transactions. In the first phase of the project, a survey was conducted with interviews of nearly 400 practitioners, financial experts, technology managers and enterprises from 10 ASEAN member states, containing direct feedback to identify the status of IP valuation in the region, potential challenges, impeding factors and recommendations. Building on the first phase, the IP valuation toolkit is being developed to facilitate application of common standards in the ASEAN region. It contains relevant processes, useful references and best reporting practices and will also be used as a specialized resource for capacity building of professionals in the region.



Photo: WIPO

Participants at the ASEAN Regional Meeting in Jakarta, June 26 and 27, 2023



Photo: WIPO

ASEAN Regional Meeting in Jakarta, June 26 and 27, 2023

In response to the global challenges posed by the COVID-19 pandemic, specific resources and training initiatives were also established by WIPO to enhance awareness and comprehension of the intricate interplay between global health, access to medical technologies, innovation, technology transfer and trade. The focus on life sciences has been a direct result of WIPO's continuous efforts to deliver customized, targeted and impact-driven support to address country-specific needs and priorities during the post-pandemic period, to harness the potential of IP as a tool that not only addresses the consequences of such pandemics but also meets the most urgent healthcare needs worldwide.

Two regional training events were organized in Asia and Latin America to support participating countries in developing skills and capacities in IP identification, protection and management, as well as technology transfer strategies for health technologies. The Asian Regional Conference for Accelerated Life Sciences Innovation took place in Manila, Philippines, from September 11 to 15 and was hosted in cooperation with IPOPHL. The event gathered over 100 participants, from Brunei Darussalam, Cambodia, China, India, Indonesia, the Lao People's Democratic Republic, Malaysia, Pakistan, Philippines, Republic of Korea, Thailand and Viet Nam. Beneficiaries also included TISC and TTO staff specializing in life sciences, with 48 percent of the participants coming from academia, 45 percent from government institutions, and 7 percent from industry and the private sector. Training topics included risk finance for life sciences innovation, IP valuation as an IP management tool, patent valuation in life sciences, and dispute resolution in life sciences. The conference highlighted the shared need for robust innovation ecosystems in this area and the important role of IP rights in technology transfer and investment in scientific research and innovation.



Photo: Courtesy of the Intellectual Property Office of the Philippines (IPOPHL)

Asian Regional Conference for Accelerated Life Sciences Innovation, Manila, September 11 to 15, 2023



Photo: Courtesy of the Intellectual Property Office of the Philippines (IPOPHL)

Participants at the Asian Regional Conference for Accelerated Life Sciences Innovation, Manila, September 11 to 15, 2023

A similar training program was organized in cooperation with IMPI for the Latin America region from May 9 to 12 in Mexico City. The Regional Conference in Support of Accelerated Life Sciences Innovation – Skills Development and Capacity Building was attended by participants from Argentina, Brazil, Chile, Costa Rica, Cuba, Mexico and Peru and included managers from various institutions and research centers involved in IP and technology transfer in life sciences. The event highlighted the need for better collaboration among biopharmaceutical industries, biotechnology firms, universities, research centers, and government entities to enhance IP and technology transfer capabilities.



Photo: Courtesy of the Mexican Institute of Industrial Property (IMPI)

Regional Conference in Support of Accelerated Life Sciences Innovation – Skills Development and Capacity Building, Mexico City, May 9 to 12, 2023



Photo: Courtesy of the Mexican Institute of Industrial Property (IMPI)

Participants at the Regional Conference in Support of Accelerated Life Sciences Innovation – Skills Development and Capacity Building, Mexico City, May 9 to 12, 2023

At the regional level, a specialized WIPO–EAPO training program to boost IP commercialization in techno parks across the Central Asian, Caucasus and Eastern European Countries (CACEEC) region was organized in Astana, Kazakhstan, on March 14 and 15. This was followed by another training for techno parks in EAPO member states held in Bishkek, Kyrgyzstan, in July, where the focus was on enhancing IP commercialization capacities through training on IP valuation.

In the Baltic States TTO Network, established in October 2022, a tailored mentorship program was developed, which targets the development of IP commercialization professionals and support for spinoffs and startups in the region.

At the national level, a number of training activities were also implemented to support TISCs and TTOs in enhancing their IP commercialization, IP management and technology transfer capacities, such as in Colombia, Cuba, Egypt, India and Samoa, with the support of resources and tools such as WIPO's technology transfer model agreements and resources in IP licensing and IP valuation.

In Cuba, a bespoke intensive training event was organized to build the capacities of staff at the Science and Technology Park of Havana and other selected institutions, in partnership with two Turkish technology parks, Bilisim Vadisi and Entertech İstanbul Teknokent, to exchange expertise in research and innovation policies and to share knowledge on how to enhance efficiency in technology park operations. The last phases of this project include the implementation of a mentoring process for four companies selected by the Science and Technology Park of Havana, and support toward the development of a technology transfer and IP commercialization institutional policy for the Science and Technology Park of Havana.

On November 6 and 7, the International Knowledge and Technology Transfer Leadership Summit, jointly organized by WIPO and AUTM in collaboration with Hub-Tech, Chile's national agency for technology transfer, also convened in Santiago, Chile. Approximately 40 global leaders in technology transfer gathered for the summit, with WIPO facilitating the participation of 10 technology transfer leaders from developing countries. Following the successful model from the previous summit in 2022, the event began with discussions on "hot topics" and progressed to address key issues such as the future landscape of technology transfer, and strategies for training the next generation of professionals. The summit reinforced the enduring partnership between WIPO and AUTM, emphasizing their joint dedication to driving advancements in technology transfer on a global scale.



Photo: AUTM

WIPO-AUTM International Knowledge and Technology Transfer Leadership Summit, Santiago, Chile, November 6 and 7, 2023

Training on institutional IP policies

For more than 10 years, WIPO has provided specific support to universities and research institutions to help them create institutional policies for effective IP management and technology transfer. The IP Policies for Universities and Research Institutions initiative has three main components: a WIPO IP Policy Toolkit, national customized versions of the WIPO IP Policy Toolkit, and project-based coaching and technical assistance to individual academic and research institutions.

The WIPO IP Policy Toolkit was created as the starting point for universities to help them deal with issues such as ownership of IP and rights of use, IP disclosure, IP management, IP commercialization, incentives for researchers, recording and accounting, and conflicts of interest. The toolkit comprises an IP Policy Writer's Checklist, an IP Policy Template for Academic and Research Institutions, and Guidelines for the Customization of the IP Policy Template.

A draft Policy Template for Use of Copyrighted Works at Universities and Public Research Institutions was further developed to complement the toolkit. The template is expected to be available in 2024.

National customized versions of the WIPO IP Policy Toolkit have been developed for 11 countries, with additional versions in development. The national versions integrate local laws, regulations and practices, reflect the countries' socioeconomic environments, and facilitate the adoption of IP policies at the institutional level and their harmonization for coordinated academic and industry collaboration. In 2023, WIPO completed the development of national versions for Algeria, El Salvador and Panama. These national models of institutional IP policies are expected to provide significant support to higher education institutions and research institutions in these countries in drafting comprehensive IP policies and in streamlining the writing process.

WIPO also provides project-based coaching and technical assistance to individual universities/institutions to support them in the formulation of effective IP policies calibrated to the local context, needs and mission. Since its establishment, the IP Policies for Universities and Research Institutions initiative has assisted more than 600 institutions in formulating IP policies. IP policies from universities and research institutions worldwide can be downloaded from the [WIPO IP Policy Database](#).

“I joined Sol Plaatje University as the first Innovation and Technology Transfer Manager at the Research Office. This entailed an enormous amount of effort to work toward creating an IP policy for the university. The WIPO IP Policy Template for Academic and Research Institutions together with the WIPO Database of IP Policies helped us gain momentum with concluding our policy within a very short period.”

Ms. Tharusha Naidoo

Innovation and Technology Transfer Manager at the Research Office, Sol Plaatje University, South Africa

“Over the past seven years, I have been advising dozens of public sector research institutions in developing countries around the world, on the importance of establishing a sound IP policy for building an effective IP/tech transfer system. The WIPO IP Policy Template, Guidelines and Checklist have been the foundational tools in that effort, in every instance.”

Dr. Richard S. Cahoon

Professor-adjunct, Department of Global Development, Cornell, and Senior Advisor, Commercial Law Development Program, US Departments of Commerce & State

“I recommend the WIPO IP Policy Toolkit – the template, the checklist and the guidelines for customization of the template – when I am advising institutions around the world on creating or updating their IP policy. The documents are thoughtful, comprehensive and clearly written, and are the only resources the institution will need.”

Ashley J. Stevens

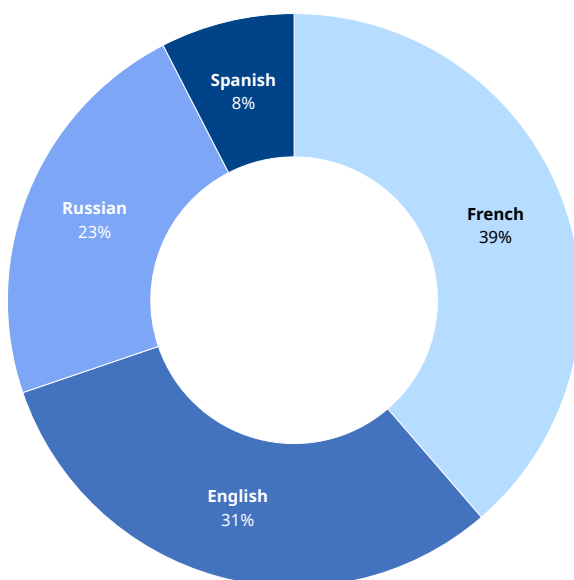
D.Phil (Oxon), CLP, RTTP, President, Focus IP Group, LLC

The WIPO IP Policy Toolkit has also been used to support specific regions in developing tailored IP policy models, for example in the ASEAN region. In 2023, an ASEAN Institutional IP Policy Model was developed as a result of a project implemented by WIPO in collaboration with the ASEAN Secretariat and supported by the Japan Industrial Property Global Funds-In-Trust. The model, which was developed based on an assessment of national legal frameworks and current technology transfer practices in the region, will assist universities and research institutions in the ASEAN region in developing institutional IP policies that provide an enabling framework for the efficient identification, management and commercialization of research outcomes and the resulting IP.

Distance learning

The e-Tutorial on Using Patent Information, which was launched in 2020 as a distance learning course (DL177) through the WIPO Academy platform, is a self-paced course specifically developed for TISCs that comprises three learning modules: patent basics, patent search and retrieval, and patent analysis.

Figure 11. e-Tutorial registrations from TISC staff, by language



Source: WIPO Academy, 2023

In addition to the e-tutorial, nearly 3,000 TISC staff also participated in other distance learning courses offered by the WIPO Academy in 2023.

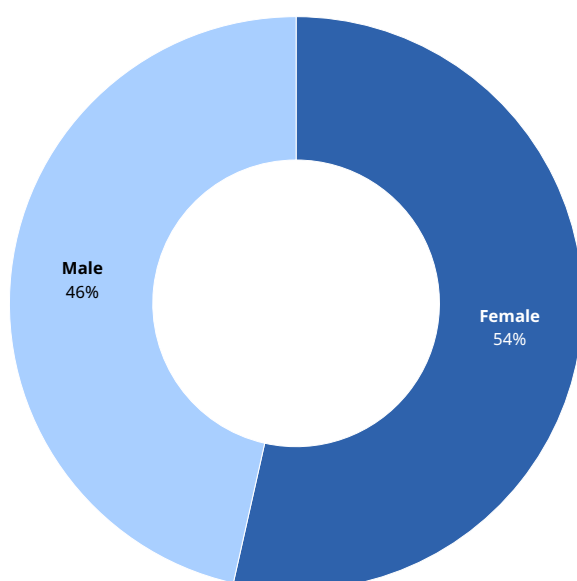
The participation of TISC staff in advanced courses on IP management, trademarks, industrial designs and copyright, in addition to their participation in courses on patents, patent search and patent drafting, reflects the need for TISCs to increase their knowledge and skills in other innovation support areas to respond to the demand from local innovators and entrepreneurs.

Figure 12. TISC staff participation in advanced courses of the WIPO Academy, by course



Source: WIPO Academy, 2023

Figure 13. TISC staff participation in WIPO Academy training, by gender



Source: WIPO Academy, 2023

Publications to support training and reinforce learning

Training is supported by publications developed for TISCs and technology transfer structures to reinforce learning. These publications are key reference sources on a range of subject areas such as patent documentation and databases, patent searches, patent analytics, technology transfer, IP management and commercialization. They are available in multiple languages.

Following the publication of the WIPO guides on identifying and using inventions in the public domain, a complementary toolkit was developed. The toolkit supports the concepts and processes introduced in these guides with a set of practical tools that help collect and analyze data to evaluate a new product development initiative and support decision-making in the development of new products and services based on inventions in the public domain. A new modular blended-learning training package to build knowledge and skills in using these tools was also developed and piloted in selected TISC host institutions in Malaysia and the Philippines.

Publications on technology transfer

A new guide, *Incentives in Technology Transfer: A guide to encourage, recognize and reward researchers and professionals*, was developed to help universities create innovative incentive programs for their academic researchers and encourage them to participate in technology transfer and knowledge exchange activities. The guide also supports technology transfer professionals to help the university TTOs expand, thrive and reduce staff turnover.



“The new WIPO guide [on incentives in technology transfer] is the first global collection of approaches used to motivate, inspire and reward creativity at the beginning stages of the innovation pathway. This is an important part of understanding our innovation ecosystems and how best to assure strong commitments toward bringing new products and services to market.”

Todd Sherer

Associate Vice President for Research, Executive Director, Office of Technology Transfer, Emory University, United States of America

Publications on patent analytics

The WITT reports are flagship publications that track technology trends through the analysis of patent and other data to provide empirical evidence on innovation in specific fields. The resulting knowledge helps business leaders, researchers and policymakers in their decision-making. The first report in the series was published in 2019 and focuses on trends in patenting of AI innovations. The second report, published in 2021, is the first large-scale overview and analysis of patenting and technology trends in the field of assistive technology, and provides information about the state of play in technologies that assist people living with physical or cognitive impairments. In 2022, preparatory work started on the third report, which will focus on the future of transportation. The WITT reports were downloaded more than 193,000 times between 2019 and the end of December 2023.

PLRs prepared by WIPO over the years have covered topics of particular relevance to developing countries such as public health, food security, climate change and the environment. In 2023, three new PLRs were published: the first, “COVID-19 vaccines and therapeutics,” was the second edition of a report first published in 2022. The first report (2022) examined related patent filings from January 2020 to September 2021, whereas the second report (2023) examined related patent filings up to September 2022, providing a comprehensive review of patenting activity and building on insights from the first COVID-19 PLR. The other two PLRs were “Graphite and its applications” and “Production of titanium and titanium dioxide from ilmenite and related applications.”

In addition to these reports, WIPO also provides access to over 250 PLRs prepared by other organizations.

PLRs published by WIPO in 2023



Several learning resources and tools to help build capacity and develop the patent analytics skills of researchers and innovators in developing countries have also been developed over the years. Methodological guidelines for preparing PLRs have been formalized in the *WIPO Guidelines for Preparing Patent Landscape Reports*, the *WIPO Manual on Open Source Tools for Patent Analytics* and the *Handbook on Patent Analytics*, with the latter two being revised and updated in recent years.