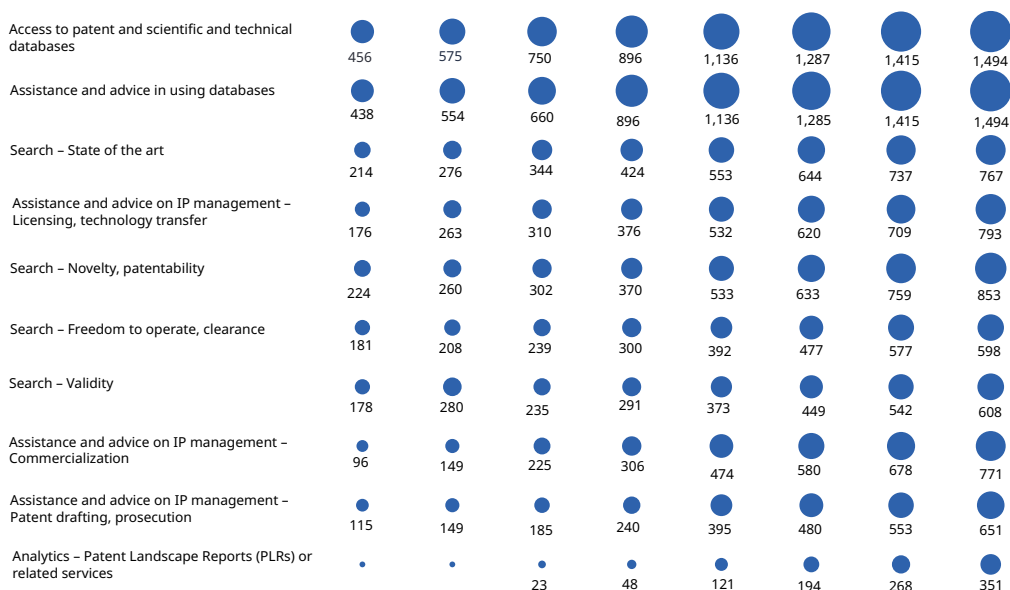


TISC/TTO network developments

TISCs and technology transfer structures play an important role in strengthening the innovation ecosystem where they are established, by fostering innovation and encouraging technology transfer.

In 2023, the global TISC network continued to grow, with 1,494 TISCs in 93 countries. TISCs provide a diverse range of services to researchers, inventors and entrepreneurs in these countries, supporting them at different stages in the innovation cycle – from assistance with using patent databases and performing patent searches to advice on IP management and commercialization.

Figure 1. Number of TISCs providing different types of services



Source: Directory of Technology and Innovation Support Centers, 2023

Since the TISC program was launched in 2009, 93 countries, of which 33 are least developed countries, have signed service-level agreements (SLAs) with WIPO to develop national TISC networks. There are also four regional TISC networks for member states of the African Regional Intellectual Property Organization (ARIPO), the Association of Southeast Asian Nations (ASEAN), countries in Central America and the Dominican Republic (CATI-CARD) and certain countries in the Arab region. In 2023, three countries – Sudan, Tajikistan, and Trinidad and Tobago – joined the TISC program. TISC networks also continued to expand and are becoming increasingly sustainable.

In **Algeria**, the TISC network coordinated by the Algerian National Institute of Industrial Property Ministry of Industry (INAPI), focal point of the national TISC network, grew significantly, with 17 new TISCs established in universities and research centers across the country – bringing the total number of TISCs in Algeria to 125.

In **Argentina**, two new institutions joined the national TISC network, bringing the total number of institutions in the network to 33 (with one institution pending renewal).

In **Belarus**, there were 30 TISCs (six new ones were established during the year) that processed around 4,000 queries, providing information and support to researchers in higher educational institutions and science and technology parks. As part of its national IP strategy, the National Center of Intellectual Property (NCIP), focal point of the national TISC network, intends to continue to expand the network to further support regional innovation activities and increase IP use and awareness in Belarus.

The TISC network in **China**, which comprises over 100 institutions, expanded to cover 31 provincial-level administrative regions in the country.

In **Colombia**, the Superintendence of Industry and Commerce (SIC), focal point of the national TISC network, signed agreements with 10 new host institutions, including seven universities and three chambers of commerce. Four additional universities also initiated the steps to become members of the network. In total, the national network currently consists of 32 institutions, including SIC. There are regional TISCs affiliated to SIC in 10 regions, and 20 cities with at least one TISC.

In **Cuba**, the TISC network grew to 22 institutions with the addition of the Fundación Universitaria para la Innovación y el Desarrollo, Universidad de La Habana. The network is coordinated by the Cuban Industrial Property Office (OCPI).

In the **Dominican Republic**, the National Office of Industrial Property (ONAPI) signed agreements with three new TISCs in the Universidad Nacional Pedro Henríquez Ureña, the Instituto Técnico Superior Comunitario and the Universidad Autónoma de Santo Domingo.

In **The Gambia**, a third TISC was established in the University of The Gambia, and the university used this opportunity to also review its institutional IP policy.

In **India**, the Cell for IPR Promotion and Management (CIPAM), Department for Promotion of Industry and Internal Trade (DPIIT), focal point of the national TISC network, reported the addition of 22 new institutions in 2023, bringing the total number of TISCs in India to 34.

In **Jordan**, there were 20 TISCs established by the end of 2023.

In **Kazakhstan**, five universities joined the TISC network in 2023, bringing the total number of TISCs to 23. TISCs were established in four regions where there were previously no TISCs (Akmola, Almaty, East Kazakhstan and Turkestan) in an effort to bring technology and innovation support services closer to local users.

Since the establishment of a national TISC network in **Liberia** in 2021, the Liberia IP Office (LIPO), focal point of the network, has signed agreements with six institutions to establish TISCs. While five of them will provide services to the public, the TISC established within the Division of Alternative and Complementary Medicines at the Ministry of Health will serve mainly to support internal research activities.

In **Morocco**, five institutions joined the national TISC network, which now consists of 59 TISCs and 70 individual focal points managing the operations of these centers.

In **Peru**, the TISC network which was established in 2016 has grown to comprise 56 members in academic and research institutions, covering 21 out of the 25 regions of Peru, with 75 trained TISC staff.

In the **Philippines**, the network's membership continued to grow from 77 to 85 institutions. The network is composed of 57 state universities and colleges, 22 private higher education institutions, two research and development institutions, three support institutions, and one local university and college. A new program entitled Generators of IP (GeneIP) was launched to expand the network with the objective to capacitate and help establish fully operational IP management and TTOs within the institutions, on the way to becoming full-fledged TISCs

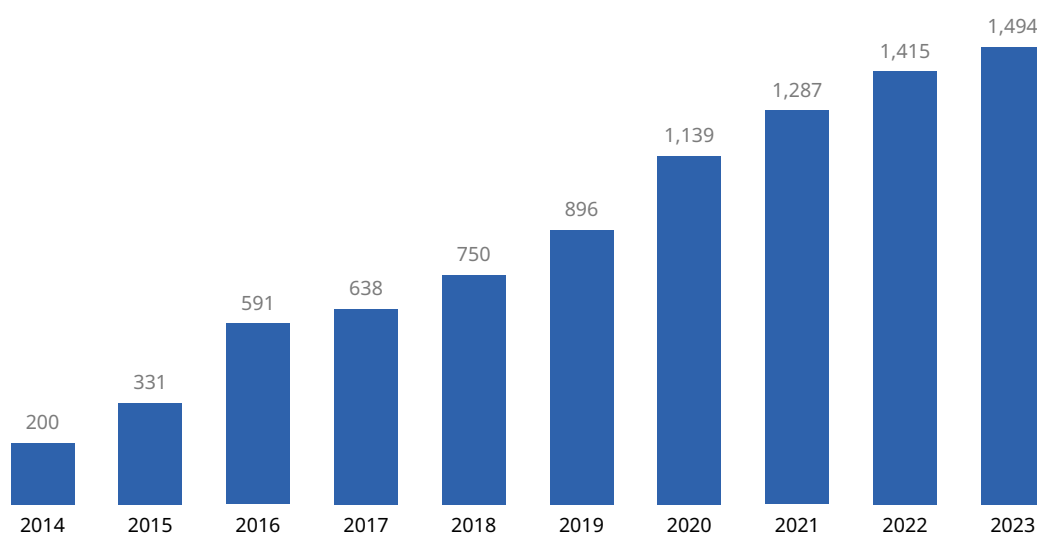
(or ITSOs, as they are known in the Philippines). Under the Intellectual Property Office of the Philippines (IPOP) ITSO 2.0 scheme, which clusters ITSOs by number and types of services provided, IPOP reported an increase in all categories, from bronze (55 percent increase with 62 institutions) to silver (70 percent increase with 51 institutions), gold (61 percent increase with 42 institutions) and platinum (the largest increase – 106 percent – with 35 institutions). Platinum-level institutions should draft and file at least seven patents, successfully commercialize IP assets and document their projected/actual income.

In **Saudi Arabia**, there was a significant increase in applications to join the national TISC network, with 16 new centers. By the end of the year, there were 64 TISCs operating in 12 out of 13 administrative regions in Saudi Arabia, representing diverse sectors, including academia, government, the nonprofit sector and the private sector. The Saudi Authority for Intellectual Property (SAIP), focal point of the national TISC network, also launched the Numo program, an initiative to increase the maturity and sustainability of TISCs in Saudi Arabia with a tiered system consisting of basic, technical, advanced and expert levels. The program encompasses various elements including knowledge transfer to staff, implementation of performance enhancement initiatives, provision of high-quality services, support to technology and innovation initiatives, and expansion of patent and IP portfolios. Key performance indicators include the number of training courses completed, the number of awareness-raising services provided, the number of technical and specialized services provided, and the number of IP rights filed or registered in a year.

In **South Africa**, 13 new institutions joined the TISC network.

In **Ukraine**, a Memorandum of Understanding between the Ministry of Economy of Ukraine and WIPO was signed in July to support Ukraine's innovative and creative ecosystem, including support for the further development and effective operation of its national TISC network coordinated by the Ukrainian National Office for Intellectual Property and Innovations (UANIPIO). In 2023, 16 new TISCs were established in Ukraine, bringing the total network to 30 TISCs, and special attention was given to supporting regional cooperation initiatives within the network. For the first time in Ukraine, a TISC was established within a regional chamber of commerce and industry with the signature of an agreement with the Vinnytsia Chamber of Commerce and Industry.

Figure 2. Number of TISCs and growth over time



Source: Directory of Technology and Innovation Support Centers, 2023

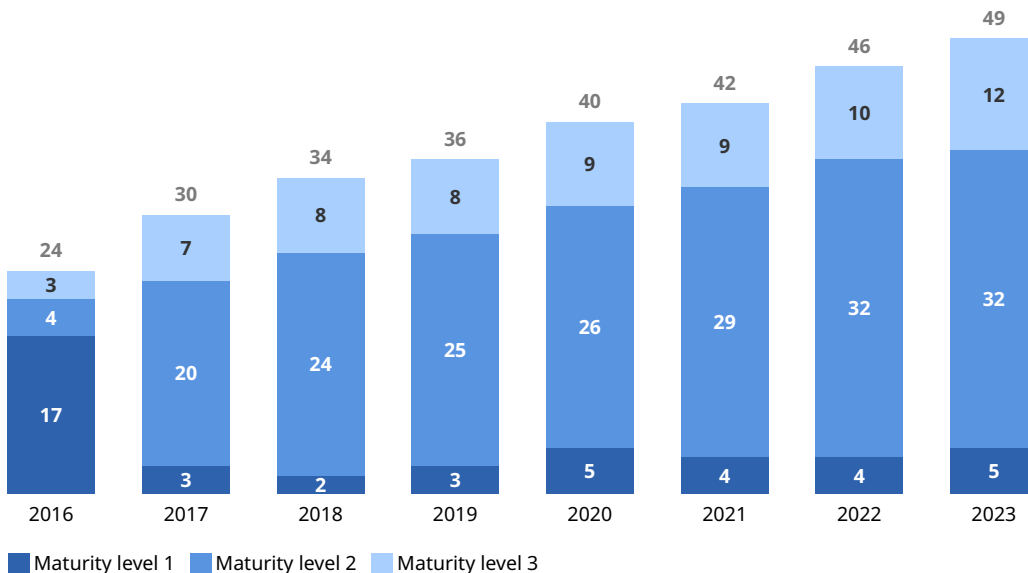
Because sustainability and the impact of national TISC networks is critical to their continuous development, maturity levels have been defined to reflect each national network's development status and the level of services it provides. These levels also provide insights into future development requirements to increase impact, as follows:

- **Maturity level 1:** Countries that have signed an SLA with WIPO, have signed institutional agreements at a national level between the TISC national focal point and TISC host institutions, and which report at least annually on national TISC activities.
- **Maturity level 2:** Countries that meet maturity level 1 standards and which provide basic patent information searches, e.g., state-of-the-art patent searches.
- **Maturity level 3:** Countries that meet maturity level 2 standards and which provide value-added IP services, e.g., patent analytics and drafting PLRs.

Ultimately, TISCs are financially and technically self-supporting institutions to which WIPO provides advice on demand.

Out of the total of 93 TISC national networks, 49 were considered to have reached at least maturity level 1 at the end of 2023, with five networks at maturity level 1, 32 networks at maturity level 2 and 12 networks at maturity level 3.

Figure 3. TISC networks by maturity level



Source: WIPO IPID, 2023

Technology transfer structures globally also continued to expand, playing a vital role in promoting innovation. Initiatives in Africa, Asia, the Baltic states and Latin America promoted the development of collective communities of technology transfer professionals and strengthened knowledge sharing on specific topics such as technology transfer strategies in life sciences and health-related technologies during regional conferences in support of accelerated life sciences innovation held in Mexico and the Philippines. In Mexico, 12 IP and technology transfer professionals from selected institutions in Argentina, Brazil, Chile, Costa Rica, Cuba and Peru participated in the regional conference on accelerated life sciences innovation hosted by the Mexican Institute of Industrial Property (IMPI) in May, and a similar event was hosted by IPOPHL in September with over 100 participants from Brunei Darussalam, Cambodia, China, India, Indonesia, the Lao People's Democratic Republic, Malaysia, Pakistan, the Republic of Korea, Thailand and Viet Nam.

In the SADC region, a pioneering technology transfer on-the-job training program initiative, led by WIPO in collaboration with SARIMA, JPO and NIPMO, paved the way for the development of a technology transfer community within the region, with the participation of technology transfer professionals from six SADC member states (Botswana, Malawi, Namibia, South Africa, Zambia and Zimbabwe). On October 19, WIPO and SARIMA formalized their partnership by signing a Memorandum of Understanding, which outlines joint initiatives in this area.



Photo: SARIMA



Photo: WIPO

Andrew Bailey, President, SARIMA, and ADG Marco Alemán, WIPO, signing the Memorandum of Understanding at the SARIMA Biennial General Meeting on October 19, 2023

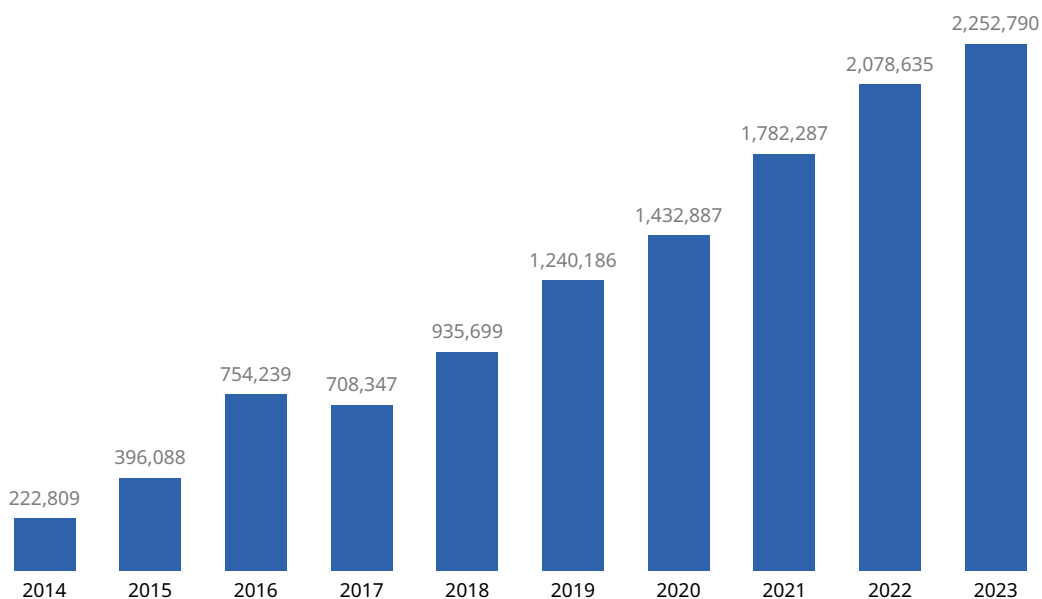
Among member states of ASEAN, two initiatives led by WIPO and ASEC, supported by the Japan Industrial Property Global Funds-In-Trust, were also implemented to strengthen capacities of technology transfer structures in the region in line with the ASEAN IPR Action Plan 2016–2015. These initiatives aim to establish common standards in IP valuation and to develop a regional IP policy model for academic institutions to provide an enabling framework for the efficient identification, management and commercialization of research outcomes and the resulting IP in the ASEAN region.

Continued increase in demand for TISC services

The worldwide growth of TISC networks and their increasing maturity and sustainability continue to be accompanied by a surge in demand for TISC services from local researchers, inventors and entrepreneurs, who are the main beneficiaries of TISC support.

Following the annual end-of-year survey completed by TISCs around the world, TISCs received over 2.2 million inquiries in 2023.

Figure 4. Number of inquiries received by TISCs



Source: Questionnaire on Progress and Needs Assessment, December 2023

In **Algeria**, the TISC in INAPI supported more than 1,000 inventors in their patent searches (in particular prior art searches), patent drafting and the filing of their applications.

In **Chile**, the National Institute of Industrial Property, focal point of the national network, which comprises five institutions, reported that TISCs responded to 261 inquiries and provided 31 technology watch reports and PLRs.

In **China**, TISCs fulfilled over 195,000 IP service requests, issued over 20,000 IP search and analysis reports, and delivered over 700 industrial sector analyses to support policymaking by local and national government agencies. The TISC hosted by the Chinese Academy of Sciences Documentation and Information Center for example supported policymaking by government agencies in the Guangdong–Hong Kong–Macao Greater Bay Area by issuing a patent analytical report highlighting the situation and trends in scientific and technological innovation in this region.

Digital IP platforms developed by TISCs in China also received over 400 million visits in 2023 alone. The TISC hosted by the Tianjin Institute of Scientific and Technical Information for example established a dedicated information platform on seawater desalination, contributing to improved information discovery in this area of technology.

TISCs in **Colombia** provided 726 services on patent and industrial design searches to 559 researchers and entrepreneurs, with 46 percent of state-of-the-art searches and 42 percent of novelty searches, 12,785 consultations on IP to 6,476 users, with a large percentage of those (76 percent) about trademarks. They also helped identify 620 inventions eligible for patent or industrial design protection.

The Registry of Intellectual Property, focal point of the TISC network in **Costa Rica**, responded to over 22,000 requests (of which over half came from women, and over 70 percent were received either by phone or by email). To respond to the growing demand for TISC services, the Registry of Intellectual Property recruited two additional staff members. The majority of inquiries concerned trademarks (over 16,000), followed by copyright and related rights (over 2,000), patents, utility models and industrial designs (over 300). Special assistance was also provided to the Business Development Center of the National Learning Institute as part of an inter-institutional collaboration initiative to support entrepreneurs in Costa Rica.

The TISC network in **Cuba** provided a total of 168 technology and innovation support services in 2023, including many on patent and trademark searches, PLRs and technology alerts.

In the **Dominican Republic**, a total of 113 patent information searches were conducted for inventors and entrepreneurs, of which 44 were done by the TISC at ONAPI and 69 by other TISCs in the country. The TISC network also provided 586 advisory services on patents, support to patent drafting and the filing of industrial property rights.

In **El Salvador**, TISCs provided 1,534 advisory services to both the public and the private sector. Most of the services concerned distinctive signs (76 percent), and the rest concerned patents (11 percent) and copyright (13 percent). TISCs also provided six technology watch services and supported the drafting of five patent applications. The number of TISC services and demand for such services in 2023 grew considerably with a reported increase of 42 percent in advisory services and 51 percent in additional requests in comparison to 2022.

In **Kazakhstan**, TISCs received around 800 requests for support, with approximately one third of these on accessing patent information resources.

In **Kyrgyzstan**, TISCs provided 1,447 services, distributed as follows: inquiries on IP legislation (803), access to patent information resources and databases (255), access to non-patent information (299) and consultations on general issues related to the filing and registration of IP rights (90).

In **Pakistan**, the Intellectual Property Organization of Pakistan, focal point of the national TISC network, reported that TISCs had responded on average to 480 inquiries per month related to patent information search and the filing of patents and other IP rights.

In **Peru**, TISCs have provided a total of 40,530 services since 2018, of which over 30 percent (13,158) were provided in 2023. By 2023, 65 percent of TISCs in Peru provided basic services, and 61 percent also provided value-added services.

Over 45,000 requests for support in accessing or using patent databases were fulfilled by the national TISC network in the **Russian Federation**.

In **Saudi Arabia**, SAIP reported a 52 percent increase in requests for TISC-related services, with 377 services provided in 2023, and an increase in the diversification of services provided.

In **Ukraine**, TISCs provided 704 consultations on IP, from access to patent and non-patent databases (23) to general information on IP protection (300), advice on IP management, IP enforcement and technology transfer (238) and support to IP commercialization (143).

In **Uzbekistan**, TISCs provided a total of 2,633 consultations on general IP issues, 543 consultations on working with patent documents, 2,623 consultations on IP protection, 927 consultations on the conclusion of license agreements and technology transfer agreements, 2,414 services to assist users in submitting IP filings and 1,293 patent searches.

TISCs as catalysts for filing patent and other IP rights applications

Many TISC networks reported a steady growth in patent applications filed with the support of TISCs, thanks to the increased number and quality of services provided to local researchers and innovators, demonstrating how IP creates value and promotes innovation.

In **Algeria**, 60 percent of the 1,170 patent applications filed by universities in 2023 were done through the TISC network. This represented 800 more filings than in the previous year. The TISC at INAPI also supported inventors in filing 40 patent applications, and 12 of them received support to file applications through the Patent Cooperation Treaty (PCT) system.

Innovation support services provided by TISCs in **Colombia** led to 2,500 new IP rights applications at the Superintendence of Industry and Commerce, including 64 patent applications, 304 industrial design filings and 2,132 trademark applications.

OCPI, focal point of the national TISC network in **Cuba**, reported a continued increase in IP rights filings thanks to the support provided by TISCs throughout the country, with one institution that stood out in particular (the Fundación Universitaria para la Innovación y el Desarrollo, Universidad de La Habana) with two patents filed in 2023, one patent in the drafting process, five patent and trademark licensing agreements concluded with Cuban companies and one patent licensing agreement concluded with a Canadian company.

In the **Dominican Republic**, events were organized by ONAPI, focal point of the national TISC network, to award patents, utility models and industrial designs to eight independent inventors and two TISC host institutions: the Loyola Polytechnic Institute in San Cristóbal, which obtained its first patent, and the Santo Domingo Institute of Technology.

As a result of the 1,534 services provided by TISCs in **El Salvador** during the year, 522 IP rights applications were filed, of which 54 percent were for distinctive signs, 28 percent for copyright protection and 18 percent for patents.

In **India**, CIPAM organized a special event on the occasion of World IP Day to celebrate women and their contribution to IP. It was reported that initiatives taken by the Indian government to promote innovations by women resulted in a fourfold increase in patent filings by women inventors over the last four years.

In **Kyrgyzstan**, TISCs supported inventors in filing 16 patent and nine utility model applications, 24 copyright registrations, three software registrations and one trademark registration.

In **Pakistan**, 461 patent applications were filed by local inventors, of which 162 were filed through TISCs. In addition to patents, TISCs also assist researchers and entrepreneurs in the

filing of other IP rights such as trademarks, designs, plant breeders' rights and copyrights. In 2023, TISCs assisted with the filing and registration of 79 IP rights other than patents. Four TISCs have also been established in women-only universities, which have supported 17 women inventors in filing patent applications in the same year.

In **Peru**, the establishment of a national TISC network and promotion of the use of scientific and technological information in research and innovation activities has resulted in a significant increase in patent filings, from 302 filings in 2016 to 803 in 2023. To promote patent-based technology transfer and the commercialization of IP, the National Institute for the Defense of Competition and Protection of Intellectual Property, focal point of the national network, now intends to place more emphasis on training in technology transfer, IP commercialization and technology marketing.

In the **Philippines**, IP filings from TISCs (or ITSOs) reached an all-time high of 2,056 filings since 2014, compared to 1,854 filings in 2022. These included 427 patent applications, 736 utility model applications, 200 industrial design applications, 172 trademark registrations and 521 copyright registrations.

Nearly 2,500 patent applications and over 3,300 trademark and copyright applications were filed with support from the national TISC network in the **Russian Federation**.

In **Saudi Arabia**, increased IP awareness and use of TISC services led to a significant increase in national filings, with over 662 registered IP rights in 2023 as reported by SAIP.

In **South Africa**, patent and industrial design applications by residents continued to increase beyond expectations as a result of the country's efforts in raising IP awareness through the TISC network and associated programs such as the WIPO Inventor Assistance Program (IAP).

In **Uganda**, IP applications increased significantly, with a rise in the number of applications from TISC host institutions as a result of increased engagement with universities and research and development institutions, and a growing interest in commercializing research results (43 percent of patent applications were filed from TISC host institutions). The Uganda Registration Services Bureau (URSB), national TISC focal point, also increased efforts to build the capacity of institutions and applicants in drafting patents, which resulted in improvements in the quality of patents and utility models filed in Uganda.

In **Uzbekistan**, the awareness-raising and training activities carried out to improve IP protection in the country resulted in an increase in IP filings with the support of TISCs: in 2023, there were 213 patent applications, 2,616 applications for trademarks and computer software registration certificates, and 241 registrations for copyright and related rights.

In **Zambia**, the Patents and Companies Registration Agency (PACRA), focal point of the TISC network, reported that five out of 14 patent applications filed in 2023 originated from TISC users, who benefited from the support and guidance of TISCs in preparing their applications. To continue to expand the national network, PACRA also organized a dedicated workshop in October to reach out to other prospective TISC host institutions, in particular Mulungushi University, Zambia University College of Science and Technology, and Copperbelt University.

Expanding the depth and range of innovation support services

To help inventors and entrepreneurs better exploit their innovation potential and create value from the IP they generate, TISCs around the world also continued to expand the range of services they offer to accompany inventors on their journey from idea to market.

In **Bhutan**, TISCs provided support to their users on searching technical information in patent databases and scientific journals such as *Scopus*. They also supported students at the Royal University of Bhutan in developing five inventions as part of their final-year projects.

TISCs in **China** supported technology transfer between academic and research institutions and industry, organizing over 3,000 networking opportunities and contributing to over 12,000 IP

transactions in 2023. Sixteen TISCs were selected by the China National Intellectual Property Administration (CNIPA), focal point of the national TISC network, as “outstanding intellectual property service cases” in 2023, out of the 40 institutions awarded this distinction. The TISC hosted by the Gansu Science and Technology Information Research Institute for example supported the Institute of Vegetables and Flowers under the Chinese Academy of Agricultural Sciences to develop an agricultural facility in the Hexi Corridor in the Gansu Province of China, contributing to the development of over 3,400 hectares of agricultural land and an additional agricultural output of CNY 200 million (approximately USD 27.5 million). The TISC hosted by the Guangzhou Zhongxin Intellectual Property Service also developed a new four-in-one service model to support the promotion of geographical indications, contributing to the promotion of the Lianping Yingzui peach as a geographical indication of Heyuan in the Guangdong Province of China.

In **El Salvador**, five out of 10 TISCs hosted in higher education institutions (Universidad de El Salvador, Universidad Dr. José Matías Delgado, Escuela Nacional de Agricultura “Roberto Quiñónez,” Universidad Salvadoreña Alberto Masferrer and Universidad Evangélica de El Salvador) updated their institutional IP policies, and an additional 19 institutions participated in a training program organized by the National Center of Registries, focal point of the national TISC network, to support them in developing their institutional IP policies.

In **Morocco**, the Moroccan Industrial and Commercial Property Office (OMPIC), focal point of the national TISC network, supported the Université Sultan Moulay Slimane in establishing a technology transfer office, with the active involvement of the TISC already established in the university. Thanks to the WIPO IAP in Morocco where the 11 experts involved in this program that support local inventors in drafting and filing patent applications are also TISC staff, seven inventors benefited from this type of support in 2023, two patent applications were filed and one patent was granted.

In **Pakistan**, TISC staff worked with other officials of TTOs and incubation centers to enable the licensing of technologies to third parties or to commercialize these as spinoffs or startups. In 2023, the TISC network supported the commercialization of 40 technologies developed by inventors in TISC host institutions.

To promote IP protection and commercialization in the **Philippines**, IPOPHL, focal point of the TISC/ITSO network, supported the elaboration of institutional IP policies in 103 out of 113 state universities and colleges, drawing on the WIPO IP Policy Toolkit to guide the drafting process. Seventy ITSOs already have an IP policy, and 35 ITSOs have integrated IP into their curriculum. IP and technology commercialization activities also continued to grow, with 40 ITSOs having successfully commercialized their IP assets, representing a 54 percent increase from 26 ITSOs in 2022. Most commercialized IP assets were trademarks (35 percent), followed by utility models (31 percent) and patents (28 percent), and the most common modality for commercialization was through licensing. In 2023, the commercial transactions of licensed and sold IP assets owned by ITSOs were documented. It was reported that the aggregate amount earned by all ITSOs in royalties, licensing fees and sales amounted to over PHP 38,000,000 (approximately USD 646,000).

In **South Africa**, a number of training events were organized for TISC staff to strengthen skills in the area of trademark and industrial design searches and technology transfer, with the objective to develop new services specifically designed to support entrepreneurs and SMEs.

In **Uganda**, three institutions received support from URSB to draft institutional IP policies to promote the commercialization of research results. URSB reported an increase in the commercialization of registered IP rights by TISC host institutions in 2023, through the issuance of licenses for inventions protected mainly by utility models and trademarks. The National Agricultural Research Organization, a TISC host institution, also reported the distribution of royalties from IP to innovators under its 16 research units.

In **Ukraine**, UANIPIO, focal point of the network, provides information and advisory services on IP, acting as the national IP and innovation hub, and offers assistance in IP management and commercialization and support to technology transfer initiatives. It also provides access to and support in using specialized patent databases and non-patent scientific literature through the

Access to Specialized Patent Information (ASPI) and Access to Research for Development and Innovation (ARDI) programs. In 2023, UANIPIO supported many TISCs in getting access to and using these programs and organized a series of dedicated training courses on these resources for the TISC network. The Ukrainian TISC network is also looking at strengthening its knowledge and skills in trademarks and industrial design searches.

Training and awareness-raising: supporting local innovators

In addition to expanding their innovation support services for local users, TISCs continued to dedicate significant resources to self-development and awareness-raising activities, indicating increased levels of sustainability and maturity.

In **Algeria**, INAPI dedicated 46 days to awareness-raising activities and organized 25 specialized training events for TISC staff, students and researchers on patent information and patent searches, reaching over 5,000 participants in total. To support TISC staff in accessing scientific and technical publications available through the ARDI program, INAPI also made available around 2,000 resources on its dedicated TISC platform. Over 100 TISC staff also participated in distance learning courses of the WIPO Academy on patent drafting and patent information search to strengthen their skills in these areas.

In **Argentina**, the National Institute of Industrial Property, focal point of the national network, organized eight training activities on IP rights, patent searches and patent drafting for TISC staff. Ten TISC staff also enrolled in advanced distance learning courses of the WIPO Academy. TISC staff at the Centro Científico Tecnológico (CONICET Salta-Jujuy), which is active in the northern provinces of Corrientes, Chaco, Formosa, Jujuy, Misiones and Salta, dedicated substantial efforts to strengthening their skills in patent information search, technology watch and IP management, and building the skills of researchers and entrepreneurs in this area, training over 100 participants on these subjects. They also supported three inventors in conducting patent searches to determine the patentability of their inventions and provided support in the patent application process.

In **Belarus**, 79 TISC staff were trained by NCIP, and six staff completed WIPO Academy distance learning courses on patents, patent drafting, IP management, and copyright and related rights. NCIP also organized the second TISC Assembly on November 28 in cooperation with the State Committee on Science and Technology and the Belarusian State University.

In **Bhutan**, there are two TISCs established in the Royal University of Bhutan (in the College of Science and Technology and in Jigme Namgyel Engineering College) and one TISC in the Thimphu Tech Park. In 2023, the Department of Media Creative Industry and Industrial Property, focal point of the TISC network, reported on five training and awareness-raising activities organized by and for TISCs that reached over 800 people. One of these was jointly organized with the National University of Computer and Emerging Sciences of Pakistan to strengthen skills and knowledge on IP management and technology transfer.

In **Chile**, the five TISCs in the national network organized 42 training workshops on IP rights (the majority on patents and trademarks) and awareness-raising events, reaching over 900 participants in total.

In **China**, over 3,000 awareness-raising events and nearly 4,000 training events were organized by the national TISC network, reaching over 950,000 participants in total and contributing to increased IP awareness and more effective use of IP throughout the country. Fourteen thousand five hundred participants also took part in events organized by CNIPA for TISCs to exchange experiences and best practices.

In **Colombia**, TISCs organized 472 workshops and awareness-raising activities on patent information and industrial property rights, reaching 13,547 participants in total. The network also organized 169 outreach activities to promote TISC services around the country. TISC staff also continued to strengthen their skills to deliver services in patents, patent information search, patent drafting, IP management and technology transfer.

In **Costa Rica**, the Registry of Intellectual Property conducted 45 online and onsite workshops on IP in collaboration with the IP Academy, focusing on training researchers and entrepreneurs in the provinces of Limón, Alajuela and Puntarenas. In total, they reached out to 2,227 participants. TISC staff also followed the WIPO Academy distance learning courses on IP management to strengthen their skills and services in this area.

In **Cuba**, a total of 364 people were trained by TISCs on how to access and use patent databases and conduct patent searches, with seven workshops dedicated to prior art searches.

To disseminate knowledge on industrial property and promote its use in the **Dominican Republic**, 138 seminars and workshops were given by the National Academy of Intellectual Property (ANPI) in ONAPI to different audiences, including students, teachers, researchers, innovators, enterprises and the general public, reaching over 5,600 participants. Of these events, 62 covered distinctive signs, 50 covered industrial property in general, 22 covered patents and four covered industrial designs. ANPI also organized a program on IP management for 20 academic institutions in the Dominican Republic in cooperation with the Universidad del Bosque of Colombia and expert speakers from the university's Legal Office of Innovation and Technology Transfer. TISC staff from ANPI also continued to participate in an important initiative of the Ministry of Industry, Commerce and Mipymes, which supports small and medium-sized enterprises in different regions of the country in their innovative activities (Ruta Mipymes project). TISC staff in the Dominican Republic also continued to train and strengthen their knowledge and skills to ensure quality services.

In **El Salvador**, TISCs provided 97 training seminars on IP (half of them onsite, the other half online) to a total of 3,835 participants from academic and other public institutions (65 percent) and the private sector (35 percent).

In **The Gambia**, the TISC at the Gambia Chamber of Commerce and Industry hosted a special event on World IP Day targeting women inventors to raise awareness of the role of IP in promoting innovation and creativity. Several other awareness-raising and capacity-building activities were organized throughout the year, including a workshop for policymakers and small and medium-sized enterprises and a workshop on patent, trademark and design searches for TISC staff. The IP office in the Ministry of Justice, focal point of the national TISC network, also trained traditional medical practitioners throughout the country on how to conduct patent searches in PATENTSCOPE.

In **Honduras**, the TISC hosted in the Directorate General of Intellectual Property, focal point of the national TISC network, organized over 20 workshops and awareness-raising activities for TISCs in the national network to support TISC staff in strengthening their skills – including on technology transfer and IP management – and to raise IP knowledge among their users. Specific TISCs in the national network such as the TISCs hosted in the Escuela Agrícola Panamericana, Zamorano, the Instituto Hondureño de Ciencia, Tecnología y la Innovación, Universidad José Cecilio del Valle and Universidad Metropolitana de Honduras also reported having organized and participated in numerous activities to promote creativity and innovation and to increase the awareness and use of IP by the students, researchers and innovators they support. Dedicated resources such as TISC brochures were also developed to help disseminate their activities and services and increase their outreach.

In **Jordan**, the Industrial Property Protection Directorate, Ministry of Industry, Trade and Supply, focal point of the national TISC network, organized an annual meeting and launched a dedicated website for TISCs to foster communication and networking among them.

In **Kazakhstan**, a new division was created within the National Institute of Intellectual Property (Qazpatent), focal point of the national TISC network, to coordinate TISC activities in Kazakhstan. A new website was developed to promote the TISC project and to disseminate TISC-related learning resources and materials.

In **Kyrgyzstan**, the State Agency of IP and Innovation under the Cabinet of Ministers of the Kyrgyz Republic (Kyrgyzpatent), national TISC focal point, developed a new training program that started in January to build IP knowledge and capacities throughout the country and train new patent attorneys from the pool of regional TISC coordinators. In total, 90 participants

benefited from this training program, four TISC coordinators applied for patent attorney accreditation and registration, and two of them successfully received their accreditation.

In **Lesotho**, the Office of the Registrar General, focal point of the national network, conducted visits to selected TISCs to support them in identifying their training needs and include these in the plans for the development of the national network.

Following a training needs assessment conducted by LIPO, focal point of the TISC network in **Liberia**, TISC staff enrolled in distance learning courses of the WIPO Academy and participated in hybrid workshops on patent, trademark and industrial design searches and patent search techniques and strategies. In total, at least 75 representatives from TISC host institutions have been trained since the establishment of the network in 2021, and two institutions are looking at adding IP to their teaching curriculum.

The Scientific and Technical Documentation and Information Centre, focal point of the TISC network in **Madagascar**, organized numerous awareness-raising and training events on IP, patent information, patent searches, and the protection and commercialization of research results, training over 130 TISC staff on these topics. Five TISC staff followed WIPO Academy advanced distance learning courses on patents, trademarks, industrial designs, geographical indications, and the collective management of copyright and related rights. The TISC network of Madagascar was also selected to participate in the pilot session of the WIPO TISC staff certification program, and eight TISC staff are currently following the training to get certified.

TISC staff in **Morocco** continued to dedicate a significant amount of their time to strengthening their knowledge and skills, with 404 participations in advanced distance learning courses of the WIPO Academy (of which 60 percent followed the advanced courses on patents, patent information search and patent drafting), and participation in a series of webinars organized by OMPIC for TISCs.

In **Namibia**, the national focal point conducted field visits to all the TISCs in the network to identify their training needs and support them in developing their range of services. As a result, a training event was organized in December on patent search tools and on the WIPO ARDI and ASPI programs.

In **Pakistan**, 116 training sessions were organized by TISC host institutions for their students, researchers and entrepreneurs, covering diverse subjects related to IP protection and commercialization.

In the **Philippines**, in addition to regular training activities conducted by IPOPHL to support the development of knowledge and skills of TISC staff in areas such as patent drafting, patent searches, IP valuation and IP enforcement, 15 TISC staff are participating in the WIPO TISC staff certification pilot program. Selected institutions also participated in a pilot training on new product development and inventions in the public domain.

Over 4,200 conferences, seminars and other events were organized by the national TISC network in the **Russian Federation**, reaching over 60,000 participants.

In **Saudi Arabia**, SAIP implemented a training program for TISCs in cooperation with two leading institutions in Saudi Arabia: King Fahd University of Petroleum and Minerals, and Saudi Aramco. The program aims to equip TISCs with the necessary skills and knowledge to enable them to provide high-quality services. It comprises three modules covering the fundamentals of IP, IP assessment and commercialization, and licensing. In 2023, 64 training activities were organized under the program, a 41.5 percent increase from training offerings in 2022, and more than 3,000 people were trained. SAIP also launched a series of newsletters to encourage the sharing of knowledge, experiences and success stories among TISCs.

In **South Africa**, NIPMO, together with WIPO and SARIMA, organized a pioneering intensive eight-week on-the-job training program at South African TTOs for 12 professionals from Botswana, Malawi, Namibia, Zambia and Zimbabwe.

In **Ukraine**, UANIPIO launched new communication channels, including a group on WIPO's eTISC platform, to disseminate information about TISC-related events and strengthen communication among members of the network. It organized and participated in 29 training and awareness-raising activities to enhance the IP knowledge and skills of researchers and entrepreneurs in Ukraine, attracting over 1,000 participants. A strong emphasis was also placed on building a network of expert speakers from TISCs and on strengthening their capacities. TISCs in Ukraine also organized and contributed to 29 events, attracting on average 35 to 50 participants per event.

In **Uzbekistan**, 60 training events were held, focusing mainly on improving the protection of IP assets in TISCs. The Intellectual Property Center under the Ministry of Justice of the Republic of Uzbekistan, focal point of the TISC network, organized the second national conference for TISCs in November, and awarded the most active TISCs and their staff on this occasion.

Regional initiatives scale up worldwide impact and reach

Regional cooperation has been important in strengthening national TISC networks and increasing their impact and reach. Initiatives facilitating the exchange of experiences and best practices to help TISC networks become more efficient and deliver targeted services have continued to flourish globally.

Regional TISC networks have been established in Africa, Asia and the Pacific, and Latin America and the Caribbean.

In the Arab region, the first TISC Arab Regional Meeting was held in Algiers in May in collaboration with INAPI to explore opportunities for strengthening regional cooperation among representatives from nine TISC networks (Algeria, Djibouti, Egypt, Jordan, Mauritania, Morocco, Oman, Palestine and Syrian Arab Republic) and the League of Arab States. An action plan was agreed upon by the participating countries to follow up on proposed activities in the region and review the progress achieved in the next annual meeting. Algeria and Djibouti also signed a bilateral agreement during this event to exchange experiences in the development of their national TISC networks and to establish a first regional TISC among the two countries.



Photo: Raoufak Kebairia

Participants of the TISC Arab Regional Meeting, Algiers, May 23 and 24, 2023

In the ASEAN region, TISC network focal points and representatives from TISC host institutions met in Surabaya, Indonesia to exchange experiences and identify best practices in TISC management and outreach. An ASEAN TISC Network Advocacy Pledge was signed, expressing the intention of the attending national TISC networks to cooperate in: (i) exchanging experiences and good practices in raising awareness; (ii) integrating good practices in raising awareness; and (iii) identifying opportunities for joint action in raising awareness, with respect to services, activities and programs for IP, innovation and development. A follow-through ASEAN TISC Interim Regional Meeting was then held in December 2023, with a focus on identifying avenues for exchanging experiences, integrating good practices and identifying joint opportunities. The regional group benefited from this meeting with the identification of action points and proposals for the next annual TISC ASEAN Regional Meeting in 2024.

In addition to the ongoing regional cooperation established among TISC networks in the ASEAN region, a Regional Meeting was also held in Shenzhen, China, in November, in cooperation with CNIPA, for certain TISC networks in the Asia-Pacific region. Representatives from the national TISC networks of China, Georgia, Indonesia, Kazakhstan, Kyrgyzstan, Malaysia, Mongolia, Pakistan, Philippines, Sri Lanka, Uzbekistan and Viet Nam shared experiences and best practices in establishing and developing TISCs and in integrating TISCs into their national and institutional strategic frameworks. They also explored ways in which regional cooperation could help them leverage the strengths of their networks and address some of the challenges they face.

In Africa, TISC network focal points from member states of ARIPO met in Harare, Zimbabwe, in February, to discuss and share experiences in the effective management of their TISC networks and the promotion of TISC services among users in their respective countries. A similar meeting was held in Yaoundé, Cameroon, in September, for TISC focal points of the national TISC networks of member states of the African Intellectual Property Organization (OAPI) to establish a regional TISC network to improve networking, knowledge sharing and resource leveraging among OAPI countries.

In Central Asia, representatives of the TISC networks of Kyrgyzstan, Tajikistan and Uzbekistan participated in the Second TISC Congress of the national TISC network of Kazakhstan, hosted by Qazpatent in Astana in October, to share experiences and good practices in the establishment of their national networks and strengthen regional cooperation for the effective management of their networks.

Bilateral cooperation also plays an important role in supporting the further development of national TISC networks and in contributing to the regional initiatives described above. In 2023, the Moroccan TISC network for instance shared its experiences and lessons learned with Oman, and other similar examples include the support provided by the focal point of the TISC network in Kyrgyzstan to the national TISC network of Kazakhstan.