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 2022, the global TISC network continued to grow, and there are now more than 1,400 TISCs in 90 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.

"Being part of WIPO's TISC system has allowed us to take full advantage of the center's resources and to make smarter decisions when using the patent system".

Zhibo Yao
Qingdao Aibo Detection Technology Co., Ltd.

Figure 1. Number of TISCs providing different types of services

	2016	2017	2018	2019	2020	2021	2022
Access to patent and scientific and technical databases	456	575	750	896	1136	1287	1415
Assistance and advice in using databases	438	554	660	896	1136	1285	1415
Search – State of the art	214	276	344	424	553	644	737
Assistance and advice on IP management – Licensing, technology transfer	176	263	310	376	532	620	709
Search – Novelty, patentability	224	260	302	370	533	633	759
Search – Freedom to operate, clearance	181	208	239	300	392	477	577
Search – Validity	178	280	235	291	373	449	542
Assistance and advice on IP management – Commercialization	96	149	225	306	474	580	678
Assistance and advice on IP management – Patent drafting, prosecution	115	149	185	240	395	480	553
Analytics – PLRs or related services			23	48	121	194	268

Source: TISC Directory, 2022

Since the TISC program was launched in 2009, 90 countries, of which 32 are least developed countries (LDCs), have signed service-level agreements (SLAs) with WIPO to develop national TISC networks. There are also three regional TISC networks for member states of the **African Regional Intellectual Property Organization** (ARIPO), the **Association of Southeast Asian Nations** (ASEAN) and countries in **Central America and the Dominican Republic** (CATI-CARD). In 2022, two additional countries – Cabo Verde and Sierra Leone – joined the TISC program, and three countries – Brunei Darussalam, the Sudan and Tajikistan – initiated the steps to sign an SLA with WIPO. TISC networks also continued to expand during 2022 and are becoming increasingly sustainable.

Algeria: The Algerian National Institute of Industrial Property (INAPI), focal point of the national TISC network, signed 11 agreements with higher education and scientific research institutions and welcomed 14 new TISCs to the network in 2022, bringing the total number of TISCs in Algeria to 108.

China: A total of 101 TISCs have been established in China across 31 provincial administrative regions.

Colombia: In 2022, the TISC network was composed of 10 regional TISCs, 19 TISCs in universities, two TISCs in research and development centers, and two TISCs in chambers of commerce.

Congo (the): The reform of the Office Congolais de la Propriété Industrielle (OCPI) in 2022 as the administrative structure of the Direction de l'Antenne Nationale de la Propriété Industrielle,

focal point of the TISC network, with an enhanced mission to promote the use and protection of IP in the Congo, is expected to strengthen TISC activities.

Costa Rica: The process was initiated to establish a new TISC in the Faculty of Economic Sciences of Costa Rica (Colegio de Ciencias Económicas de Costa Rica).

Ecuador: From 13 TISCs in 2021, the national network grew to 14 in 2022 with one new member, the public Universidad Técnica de Manabí (UTM). Five additional institutions signaled their interest in joining the network and initiated the process to establish TISCs within their institutions. To encourage exchanges and networking, the National Service of Intellectual Rights (SENADI), focal point of the TISC network, organized an online meeting for all TISCs in April.

Gambia (the): The University of the Gambia (UTG) formalized its intention to establish a TISC and join the national network. The launch of this new TISC is expected to coincide with the launch of the university's institutional IP policy, which will be the first of its kind in the Gambia.

Jordan: The TISC network grew from 18 to 19 members, with four additional institutions in the pipeline.

Kazakhstan: The TISC network grew significantly, with 16 new TISCs established in 2022 since the launch of the network in 2021. Most of them are in higher education institutions and will aim to provide services to support the commercialization of scientific and technical research results from these institutions.

Madagascar: The TISC network continued to grow, from 73 institutions in 2021 to 76 institutions in 2022, with the addition of two new universities and a business and industry support institution.

Niger: Five new TISCs were established in the universities of Agadez, Diffa, Dosso, Tahoua, and Tillabéry.

Pakistan: Two new research institutions joined the TISC network in 2022, bringing the total number of TISCs in Pakistan to 36.

Peru: Since the launch of the TISC network in 2018, 51 institutions have joined the network, covering 19 out of the 25 regions in the country. Seventy professionals have been trained on patents and patent searches since then, and act as TISC staff. New TISC staff benefit from an accelerated learning scheme to become operational and to benefit from more advanced training with the rest of the network.

Philippines (the): In 2022, the TISC network in the Philippines comprised 77 TISCs (or ITSOs, as they are known in the Philippines), of which 50 are state universities and colleges, 22 are private higher education institutions, two are research and development institutes, and three are support institutions.
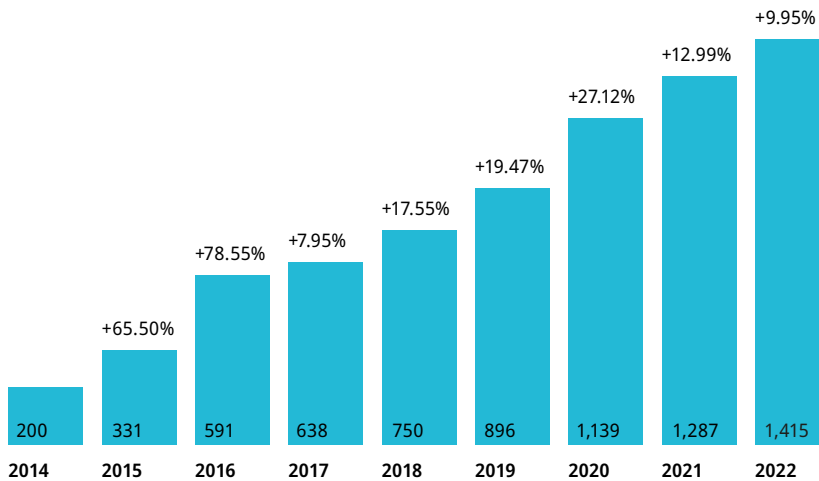
In 2019, the IP Office of the Philippines (IPOPHL), focal point of the national TISC network, launched the ITSO 2.0 program, followed by the launch of a clustering scheme in 2020, which groups TISCs based on their service offerings into four categories (bronze, silver, gold and platinum) to promote and stimulate TISC performance. To qualify as bronze, which is the minimum requirement, TISCs must provide at least 12 IP education services, two patent search assistance services and one patent drafting service. To become silver, TISCs must provide 24 patent search services. To qualify as gold, TISCs must file and draft at least six patents. Finally, to reach the platinum level, TISCs must file and draft at least seven patents and successfully commercialize a technology or creative product. In 2022, 40 ITSOs qualified as bronze, 30 as silver, 26 as gold and 17 as platinum. All clusters witnessed significant growth (between 50 and 75 percent increase in each of the silver, gold and platinum clusters) from 2021 to 2022.

Russian Federation: The network was composed of 182 TISCs in 2022, established in its eight federal districts. The Federal Institute of Industrial Property (FIPS) in the Federal Service for

Intellectual Property (Rospatent), focal point of the network, concluded agreements with 12 new institutions and renewed 13 agreements.

Uganda: Three new TISCs were established in 2022 at Gulu University, the Islamic University in Uganda and Lira University, bringing the total number of TISCs in the national network to 32.

Figure 2. Number of TISCs and growth over time
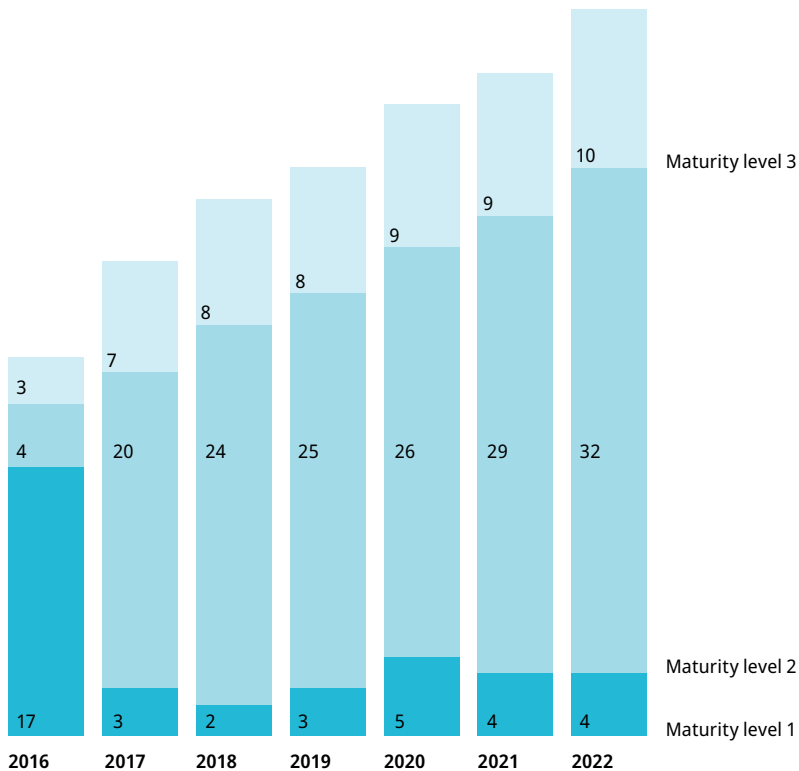

Source: TISC Directory, 2022

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. The levels are 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 report at least annually on national TISC activities.
–   **Maturity level 2:** Countries that meet maturity level 1 standards and that provide basic patent information searches, e.g., state-of-the-art patent searches.
–   **Maturity level 3:** Countries that meet maturity level 2 standards and that provide value-added IP services, e.g., drafting PLRs.

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

Out of the total of 90 TISC national networks, 46 were considered to have reached at least maturity level 1 at the end of 2022. This comprised four networks at maturity level 1, 32 networks at maturity level 2 and 10 networks at maturity level 3.

Figure 3. TISC networks by maturity level

In 2022, technology transfer structures also continued to grow worldwide and to play an important role in fostering innovation and technology transfer. WIPO's support in this area led to the establishment of a **Baltic States TTO Network**. This was the result of a WIPO regional project on reinforcing the IP commercialization capacity of innovation stakeholders of Baltic States to support their competitiveness and economic growth. To ensure the sustainability of the results achieved in the project, including the establishment of a pool of IP commercialization professionals, a memorandum of understanding (MoU) was signed by WIPO with the Baltic States TTO Network on October 27, 2022, confirming WIPO's determination to continue supporting the network through customized programs and projects, such as a mentoring program for network professionals to enhance the creation of spin-offs and startups.

Signature of MoU between WIPO, Estonia, Latvia and Lithuania for the establishment of the Baltic States TTO Network, Vilnius, October 27, 2022
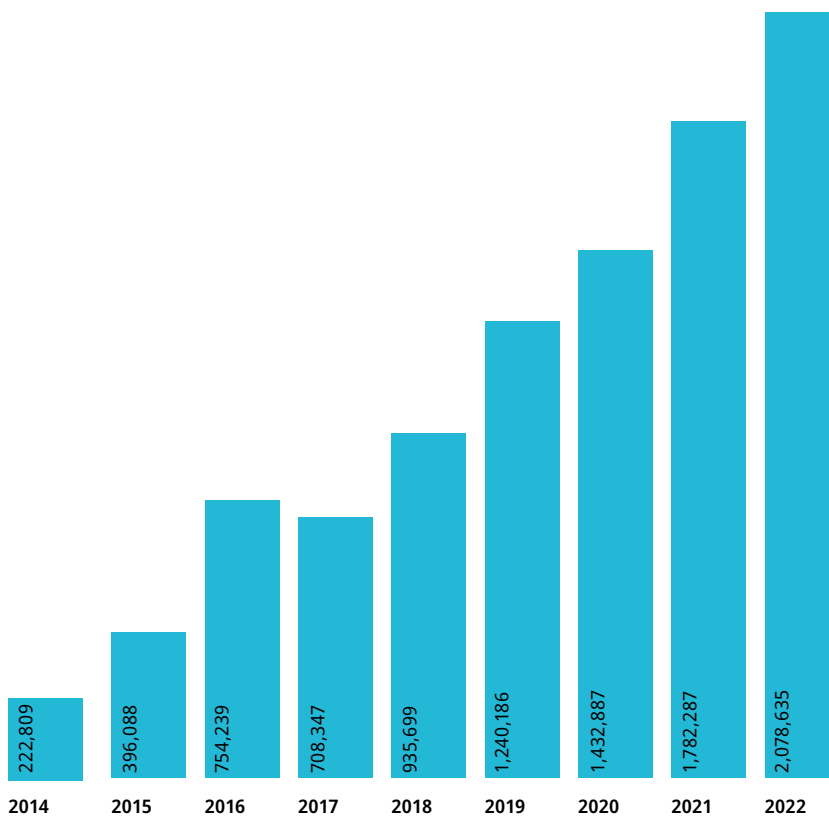
Projects on upgrading IP commercialization capacities were also implemented in other regions, such as the **WIPO-Eurasian Patent Organization (EAPO) project** on enhancing the IP commercialization capacities of techno-parks in EAPO member states. In addition, capacity-building was delivered for the League of Arab States (LAS) to support techno-parks in the Arab region.

Continued increase in demand for TISC services

The worldwide growth of TISC networks and their increasing maturity and sustainability has been accompanied by a surge in demand for TISC services. This has come 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 two million inquiries in 2022, an all-time record.

Figure 4. Number of inquiries received by TISCs

2014	2015	2016	2017	2018	2019	2020	2021	2022
222,809	396,088	754,239	708,347	935,699	1,240,186	1,432,887	1,782,287	2,078,635

Source: Questionnaire on Progress and Needs Assessment, December 2022

China: TISCs provided more than 270,000 free-of-cost search and consulting services on IP and issued more than 12,000 informative reports to support researchers, inventors and entrepreneurs in their innovation activities. The network also offers access to more than 650 online IP information databases and platforms, which received over 147 million visits in 2022.

Colombia: TISCs continued to receive an increasing number of requests in 2022 compared to previous years. It responded to 13,456 requests for assistance on industrial property matters, most of which concerned trademarks (79 percent). TISCs also conducted 677 technology searches (of which 53 percent were state-of-the-art searches and 33 percent were novelty searches) and provided guidance on IP protection for 617 projects. Most beneficiaries (91 percent) were entrepreneurs.

Costa Rica: TISCs responded to over 16,600 requests for technical assistance, the majority of which were on trademarks (14,566 requests). While most of the requests were received over the phone or online, the network reported an increase in onsite visits in November and December 2022.

Cuba: TISCs provided 835 different services, ranging from assistance and advice on IP protection and management to patent and specific technology searches.

Dominican Republic (the): TISCs carried out 59 patent searches, including state-of-the-art and novelty searches, for different projects. Of these, 30 were carried out by the main TISC located in the National Office of Industrial Property (ONAPI), and 29 by other TISCs in the national network. The network also responded to 257 requests for assistance on patentability and patent drafting.

Ecuador: TISCs responded to 286 requests, carried out 134 patent searches, and supported 11 patent, two utility model and five industrial design filings in 2022.

Egypt: On average, the TISC network received 720 visits per month.

Kyrgyzstan: TISCs provided 580 services to local inventors, researchers, students, and small and medium-sized enterprises (SMEs).

Mongolia: TISCs provide IP training and patent search services for students, researchers and professors at universities and for the public. In 2022, TISCs delivered nearly 900 patent searches.

Peru: Since the launch of the network in 2018, TISCs have provided 27,372 innovation support services, of which 5,247 were in 2022. Seventy percent of TISCs provide basic patent information services and 57 percent also provide value-added IP services.

Sri Lanka: TISCs responded to over 400 requests from visitors and conducted 120 prior art searches.

Uzbekistan: TISCs provided nearly 4,800 consultations during 2022, largely in the form of advice on drafting and filing patent applications, support for searching and understanding patent documents, and other legal aspects. A significant number consisted of providing advice on and support to the conclusion of licensing agreements.

Expanding the depth and range of innovation support services

With the demand for TISC services continuing to grow, TISCs have been expanding their range of services to help local inventors and entrepreneurs better exploit their innovation potential.

China: In addition to basic search and consulting services on IP, about 75 percent of TISCs provide information on IP to local policymakers and decision-makers to support regional economic development and industry development planning. In 2022, TISCs supported more than 8,400 projects where they facilitated the transfer of knowledge and technology and helped bridge the gap between academia and industry.

Costa Rica: TISC staff received training on WIPO's mediation and arbitration center dispute resolution options to be able to respond to requests in this area from local users and advise them on the available options and mechanisms.

Egypt: Twenty-three TISC host institutions received support in drafting their IP policies, which will help to provide a clearer framework for IP management, ownership and technology transfer issues in these institutions.

India: TISCs have been active in establishing and supporting the development of 36 new intellectual property rights (IPR) cells, extending the reach of the TISC network and its ability to identify inventions with the potential for patent protection and deliver IP services including

assistance in patent filing. With help from the Gujarat Council on Science and Technology, a TISC host institution in India, a high school student and her teacher were able to successfully file and were granted a patent for a herbal handwash.

Kyrgyzstan: In cooperation with Rospatent, Kyrgypatent, the focal point of the TISC network, succeeded in providing selected TISC host institutions with access to additional commercial databases from the FIPS, in addition to access to the Eurasian Patent Information System (EAPATIS) and other patent and IP rights search systems.

Pakistan: With the expansion of new TISC services in IP and technology commercialization, TISCs supported the commercialization of 23 products, technologies and designs in Pakistan in 2022.

Philippines (the): The IP Management and Technology Transfer Division of the Documentation, Information and Technology Transfer Bureau (DITTB) in IPOPHL, the unit responsible for the operation of the TISC network, developed a course module on IP valuation designed to upskill the ITSOs (TISCs) and prepare them to provide IP valuation as part of their IP commercialization service strategies. Training on IP valuation was also extended to other public research institutions outside of the TISC network to increase program awareness and reach. In 2022, 26 ITSOs also successfully supported the commercialization of IP assets. A total of 49 IP assets were commercialized, and the most common modality adopted for commercialization was licensing.

Sri Lanka: TISCs are increasingly aiming to build their capacities and services in the area of technology transfer and IP commercialization. The TISC network also aims to increase its IP outreach to young innovators.

Ukraine: A catalogue of 52 inventions and 105 utility models owned by institutions hosting TISCs was developed in order to promote their further commercialization.

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.

Bhutan: Five IP awareness-raising activities were carried out by TISCs under the guidance of the Department of Media, Creative Industry and Intellectual Property, reaching over 500 students, researchers and entrepreneurs. TISCs have been established at the Royal University of Bhutan, in the College of Science and Technology and Jigme Namgyel Engineering College, and at the Thimphu Tech Park, where they deliver general information on IP laws and on IP filing, management and strategies, as well as assistance in searching patent and scientific and technical databases.

Burkina Faso: Three workshops were organized in 2022 on the protection of IP rights and on how to access and use patent, scientific and technical databases for research and development. The workshops reached 242 participants.

Cameroon: The Directorate of Technological Development and Industrial Property in the Ministry of Mines, Industry and Technological Development (MINMIDT), focal point of the TISC network, visited 10 TISCs in the network to support them in the development of their services and raise awareness of TISC services among local students, inventors and entrepreneurs.

Chad: The newly established TISC network (2021) met in February 2022 to discuss the development of the network. The meeting resulted in the establishment of a mechanism to encourage collaboration among universities and research centers in the implementation of the TISC project.

China: TISCs conducted over 2,400 awareness-raising and training events and reached more than 850,000 people, making an important contribution to reinforcing IP awareness and building an innovation culture in China.

Colombia: The TISC network organized 444 industrial property, technology and patent information awareness-raising activities, reaching over 12,000 participants. It also organized 161 events to promote TISC services, reaching over 5,500 people in the country. TISC staff also received additional training on trademarks and industrial designs to support requests in these IP areas.

Comoros (the): The University of Comoros organized a three-day workshop on the use of Research4Life resources for research, in which over 200 science students took part. It also participated in a seminar organized by Intellectual Property Rights and Innovation in Africa (AfrIPI) for the development of university–business innovation platforms in member states of the African Intellectual Property Organization (OAPI).

Costa Rica: Fifty-two online training events were organized by the national TISC focal point, the Registry of Intellectual Property. Of these, 14 focused on patents, 14 on copyright and 15 on trademarks. The other four TISCs in the national network organized an additional 44 training events. To support wider access to IP information and knowledge, in particular to inventors and entrepreneurs living in remote areas, the TISC network will be increasing digital content that can be disseminated at low or no cost. TISC staff also received 17 training sessions on various IP topics including IP management, IP licensing, arbitration and mediation, patents and trademarks.

Côte d'Ivoire: The Ivorian Office of Intellectual Property (OIPI), focal point of the TISC network, developed a three-dimensional operational structure to increase IP awareness in schools and higher education institutions, composed of a technology database access center, an IP awareness-raising and training center, and a technology transfer center. In 2022, training sessions were provided to 216 teachers and education professionals and 180 students and researchers.

Cuba: Eighteen TISC staff successfully completed advanced distance learning courses offered through the WIPO Academy on trademarks, patents, patent drafting, patent information searches, IP management, and medical technologies and innovation, despite connectivity challenges encountered by some TISCs in regions outside the capital.

Dominican Republic (the): The National Academy of Intellectual Property (ANPI) and the national TISC focal point in the ONAPI organized 205 seminars and workshops (81 on industrial property in general, 82 on trademarks, 36 on patents and six on industrial designs). The events reached 6,217 participants from the public and private sectors, with a high proportion of women (over 56 percent). On World IP Day 2022, which celebrated IP and youth, an event was organized to promote innovation management in universities, with representatives from 14 higher education institutions. To educate youth on IP, the ONAPI and ANPI also organized a number of workshops for school students and young entrepreneurs.

Egypt: To address staff turnover issues, a mentorship program was created so that experienced TISC staff could support new and less experienced TISC staff, with training and support from the Egyptian Patent Office.

Ethiopia: TISC host institutions received training on IP, patent drafting, technology transfer and IP commercialization, which resulted in a better understanding of IP in these institutions. The Ethiopian Intellectual Property Authority (EIPA), focal point of the TISC network, plans to encourage additional institutions to join the network to increase collaborations and IP awareness in academic and public research institutions in the country.

Gabon: TISC staff in the newly established TISC network (2021) started training on IP through the WIPO Academy's general distance learning courses, with the intention to move on to more advanced courses on patents and patent information searches in 2023.

Guinea: A hybrid workshop was organized to support the development of the knowledge and skills of TISC staff in May 2022, with a focus on how to search for patent information as well as non-patent literature available through the Research4Life program, and how to search for trademarks using WIPO's global databases.

Honduras: The TISC focal point in the Directorate General of Intellectual Property (DIGEPIH) organized two training sessions on patent searches and on trademarks and copyright for a total of 33 TISC staff from two host institutions, and carried out visits to many of the other TISCs in the network to identify their needs and establish action plans for the upcoming year. Workshops on patents were also organized as part of a hybrid event to celebrate World IP Day on April 26, with the participation of 127 people.

India: TISCs carried out over 300 IPR awareness-raising programs, including seminars, workshops and webinars on topics including patent searching and patent protection, with one webinar being attended by over 1,000 participants.

Jordan: The TISC network supported the organization of an industrial design competition for young innovators aged 10 to 17 in conjunction with World IP Day 2022, the theme of which was "IP and Youth: Innovating for a Better Future."

Kazakhstan: On November 29, 2022, over 50 representatives from new and prospective TISC host institutions met at the first large-scale event in Kazakhstan since its establishment to discuss the development of the national TISC network.

Madagascar: The TISC network participated in the annual Science Hack Day event organized by the Scientific and Technical Documentation and Information Centre (CIDST), focal point of the TISC network. In 2022, the event brought together 20 inventors, scientists and researchers over 48 hours to collaborate on innovative projects that aimed to meet sustainable development goals, followed by a series of workshops offered by the CIDST to support participants further in the development of their projects. The workshops included training on project management, business models, marketing and IP rights management. TISC staff also continued to dedicate time to developing their knowledge and skills by participating in distance learning courses, webinars and "Ask the Expert" sessions offered by WIPO.

Mongolia: In 2022, TISCs organized 20 training events in cooperation with the IP Office of Mongolia. The TISCs at the National University of Mongolia (NUM) and at the University of Internal Affairs also actively promoted IP awareness and technology transfer through events and competitions, including the NUM Startup 2.0 event and the "Innovation 2022" competition.

Nigeria: The Patents and Designs Registry, focal point of the TISC network, established a yearly program within the context of the TISC project to raise IP awareness among youth. It also coordinated a workshop to support the further development of the network, which was attended by 50 participants.

Pakistan: IPO Pakistan, focal point of the national TISC network, organized 28 capacity-building sessions on various aspects of IP rights, including patent information, with different TISCs across the country.

Peru: To strengthen the capacities of TISCs to provide additional value-added innovation support services such as support to technology transfer, IP management and IP commercialization, the WIPO Academy's advanced distance learning course on IP management (DL450) has been added to the list of compulsory courses as part of TISC staff training (which includes advanced courses on patents, patent information search and patent drafting).

Philippines (the): IPOPHL, focal point of the national TISC network, continued to conduct workshops on IP curriculum development, helping more universities to integrate IP into their academic curricula. As a result, a greater number of TISCs now offer IP as either a three-unit subject or a full course. As of 2022, there were 33 TISCs that had integrated IP in their curricula, a 57.14 percent increase from 21 ITSOs in 2021. Recognizing the importance of an IP policy in guiding the creation, protection and commercialization activities of universities, IPOPHL also provided training to members of the TISC network on IP policies, drawing on the WIPO IP Policy Toolkit.

Russian Federation (the): The Ninth TISCs Congress, entitled "Integration of TISC Resources for the Technological Development of the Regions," took place in Saransk. The congress focused on how to strengthen the role of TISCs in building IP management systems within their institutions

and how to strengthen regional cooperation among TISCs, technology transfer centers, and scientific and educational centers in the Russian Federation. One-hundred and ninety-six participants attended the congress. Nine workshops were organized for TISCs in 2022, reaching a total of 2,094 participants. The eTISC platform is also an important tool for the TISC network in the Russian Federation and supports networking and communication. The platform is used by TISCs mainly for cooperation and information exchange, access to IP rights search systems of FIPS, Rospatent and the All-Russian Patent and Technical Library, coordination of activities, and reporting.

South Africa: TISCs continued to engage in IP training and awareness-raising activities across the country. One example is the Innovation Festival organized by the TISC at the University of South Africa (UNISA) in December 2022 to engage students, innovators and industry experts in a conversation about innovation, commercialization and entrepreneurship in general.

Sri Lanka: The TISC network organized 64 IP awareness-raising events and 27 activities on innovation and IP commercialization.

Ukraine: TISC staff participated in a series of trainings within the framework of the WIPO IP Training Institutions (IPTIs) project, which aims to equip local trainers with the teaching and technical skills needed to deliver IP training through the National IP Training Center, a focal point of the TISC network. TISC staff also participated in online trainings in the area of IP protection and enforcement and in an international conference organized in cooperation with the Polish Patent Office.

Uzbekistan: Fifty-five training events were organized in 2022, both onsite and online, to further develop the knowledge and skills of TISC staff. In November, the first national conference brought together TISC staff from 30 TISC host institutions to reflect on the results of the network since its establishment in 2017 and discuss its further developments.

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.

Algeria: Thanks to the support researchers and inventors received from TISCs in 2022, including 45 awareness-raising days and 13 specialized training sessions for over 6,000 researchers and project leaders, the number of patent applications filed by residents doubled. An estimated 63 percent of the total applications were filed with the support from TISCs.

Colombia: Thanks to the support and guidance provided by TISCs to local innovators and entrepreneurs, 3,249 IP protection filings were reported in 2022, of which 207 were patent applications, 266 industrial design registrations and 2,776 trademark registrations.

Cuba: Innovation support services provided by the TISC network contributed to the registration of two industrial designs, five trademarks and five patent applications through the TISCs in Camagüey and Santiago de Cuba.

India: TISC host institutions filed 134 patent applications and 136 other IP applications and succeeded in licensing or commercializing 53 patents for technologies ranging from augmented reality to building materials to treatments for psoriasis.

Kyrgyzstan: TISCs supported the filing of 17 patents and utility models, and five applications for software, copyright protection and trademarks.

Mali: The establishment of the TISC network has led to significant improvements in the quality of scientific research, thanks to a better understanding of how to search and use information contained in patent databases and access to academic and professional peer-reviewed journals and books available through the Research4Life program.

Pakistan: Out of 376 patent applications filed by indigenous inventors in Pakistan, 167 were filed with support from TISCs.

Philippines (the): The year 2022 saw an overall increase in IP filings from TISCs as compared to 2021 for: patents (+8.1 percent); utility models (+1.6 percent); industrial designs (+89.6 percent); trademarks (+29 percent) and copyright (+181.7 percent). With an aggregate total number of IP filings of 1,854 generated by TISCs in 2022, a number which surpassed its all-time pre-pandemic record high in 2019 (of 1,624 IP filings), it appears that TISCs have rebounded remarkably post-pandemic.

Sri Lanka: A total of 40 patent applications were filed with support from TISCs, and 20 patents were granted.

Uganda: Forty-five percent of utility model applications and 18 percent of patent applications in 2022 were filed with the support of TISCs in the national network.

Uzbekistan: TISCs provided guidance on the filing of 407 patent applications.

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 flourished globally.

Regional networks have been established in Africa, Asia and the Pacific, and Latin America and the Caribbean, which provided important inputs to a TISC staff certification scheme launched in 2022, ensuring that the certification scheme is adapted to the situation and needs of TISCs worldwide.

In the Central American region, member states of the Secretariat for the Economic Integration of Central America (SIECA) met in Guatemala in October 2022 to discuss IP-related issues in the region. They emphasized the importance of prioritizing the revival of TISC networks in SIECA member states that have a national network (all members except Belize) to support the further development of the regional TISC network in **CATI-CARD**.

Exchanges also took place among TISC networks in specific regions, with more advanced networks supporting the development of newer TISC networks, including through an exchange of experiences and training. In **Kazakhstan**, the national TISC focal point of **Kyrgyzstan** and the coordinator of the TISC hosted at Osh Technological University, Kyrgyzstan, shared their experiences and lessons learned with the newly established Kazakhstan network on the development and management of national TISC networks and TISCs.

In **Viet Nam**, the IP Business Services and Development Division within the DITTB in IPOPHL, focal point of the national TISC network of the **Philippines**, which has expertise in patent searches and patent analytics, conducted patent search training for members of the TISC network of Viet Nam, in line with the objective of the ASEAN regional TISC network to increase regional collaboration and efforts to support and mentor TISC staff.