

Accompanying local innovators on the journey from research to product Technology and Innovation Supposes

Innovation Support Centers (TISCs) Report 2021

Foreword

The global Technology and Innovation Support Center (TISC) program enables innovators in developing countries, least developed countries and transition countries to access and use technological information from more than 130 million published patent documents and scores of scientific and technical publications, to help them reach their innovative potential. TISCs are typically located in patent offices, universities, research centers or science and technology parks, and they provide assistance to innovators where they need it most.

The journey from research to product is challenging, and getting economic outcomes from research investments requires technical knowledge, deep expertise and close connections between researchers, businesses and government. TISCs help ease this journey by providing powerful tools and local knowledge, which allows them to be better connected, and in that connection the magic happens.

Daren TangDirector General

The TISC program is administered by the IP and Innovation Ecosystems Sector, IP for Innovators Department, in the World Intellectual Property Organization (WIPO). The program supports WIPO's mission to help member states develop their intellectual property (IP) and innovation ecosystems to drive enterprise and economic growth, and to support researchers and innovators in using IP for technology transfer and business growth.

The vision of the TISC program is to evolve continuously and to be inclusive, adapting to the needs and challenges of innovators. With the addition of the new technology transfer section to the department in 2021, the program also hopes to provide a greater variety of technology transfer and innovation services. Examples of such services include the development of Institutional IP Policies, IP rights management, IP marketing, IP valuation and development of negotiation skills, while also expanding the types of services and users, and incorporating technology transfer structures such as technology transfer offices (TTOs), techno parks or IP hubs into the TISC program.

The technology transfer section strengthens the program by expanding the types of users it targets, and encouraging interactions between innovators within technology transfer structures so they can share their knowledge, platforms, experiences and best practice with the global innovation community worldwide.



Key developments

In 2021 the TISC program continued to expand its range of resources, enabling TISCs worldwide to better support local innovators. Examples of developments include the integration of specialized technology transfer resources into the TISC program, and the first Global TISC Conference.

WIPO INSPIRE and the Patent Register Portal, two online platforms for information on patent databases and patent registers, were updated and improved. A new online environment was developed that integrates these tools so users can easily access up-to-date information in one place, providing researchers and innovators with a better user experience.

To support TISCs in strengthening their capacities and knowledge at all stages in the innovation cycle, new resources were developed, such as a methodology and toolkit for assessing training needs in IP management and technology transfer. A digital training package related to new product development was built, and a course on the use of inventions in the public domain was piloted in two countries.

An important initiative in 2021, continuing into 2022, is to integrate existing resources – such as those developed by WIPO related to IP policies and for TTOs – and adapt them for TISCs and their users. The inclusion of technology transfer aspects in the TISC program was launched at the first Global TISC Conference, held from November 29 to December 1, 2021. One day of the conference was devoted to international technology transfer collaboration and networking as a way to support new markets and partners to access research outcomes.

The second *WIPO Technology Trends*, a flagship WIPO report on assistive technology, was published in 2021. The report identifies emerging assistive technologies and nine enabling technologies that made possible both advancements in the field and the introduction of new assistive products. The report also includes interactive visualizations of conventional and emerging assistive technologies that enable audiences to analyze the results based on their specific interests. An interactive and accessible platform based on the NASA Technology Readiness Level methodology was also launched, which indicates how close emerging assistive technologies are to being commercialized.

In the area of patent analytics, the WIPO *Manual on Open Source Tools for Patent Analytics* was updated and an online tutorial was prepared to support its use. With the COVID-19 pandemic continuing to disrupt travel and onsite training, new ways of delivering training were explored. A "serious game" on patent analytics was developed, the first of its kind at WIPO. The game will be launched in 2022, using a digital board game environment in which different scenarios enable participants to practice what they have learned during the training, improve their critical thinking and understand the necessary thought processes during a patent analytics workflow.

A patent landscape report was prepared on early indications from the patenting activity related to COVID-19 vaccines and therapeutics during the pandemic. The analysis was complemented by clinical trial data and initial information on use of the patent system and how different jurisdictions accelerated patent prosecution for COVID-19-related patent applications. The report was published in March 2022.

Finally, to support the growing global TISC network of 88 national networks and 1,287 TISCs worldwide in the area of project management, a TISC Project and Performance Management (TPPM) platform was developed. This will allow TISCs to manage their projects and activities within a stable and reliable communication and data-sharing environment. Alongside this, a project for the development of a TISC host institution assessment tool was developed. The tool will support TISC focal points in identifying the main strengths and needs of the institutions in their network to ensure that TISC staff receive targeted training. Both projects will be piloted in 2022.

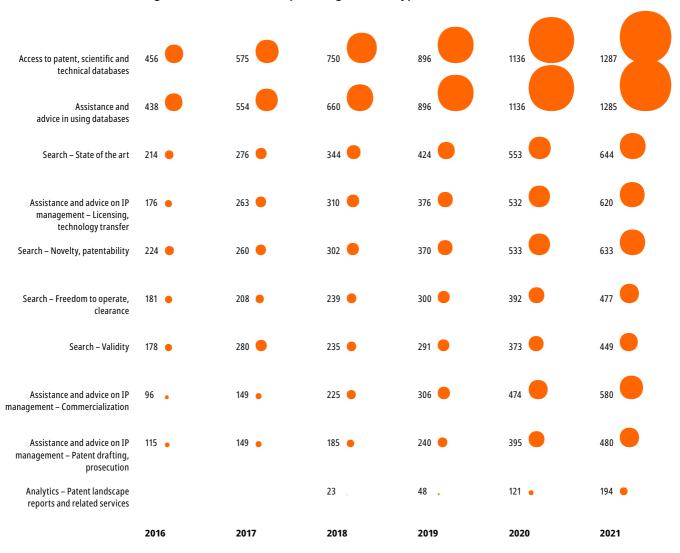


1,200+ TISCs

TISCs play an important role in strengthening the innovation ecosystem where they are established, by fostering innovation and encouraging technology transfer. They provide a diverse range of services at different stages in the innovation cycle, from state of the art and novelty searches to freedom to operate searches, as well as providing advice on IP management and commercialization. Through this assistance, researchers, inventors and entrepreneurs are empowered to use strategic information to support their technological and economic development.

The TISC program is still growing; there were 1,287 TISCs in 88 countries in 2021. Despite the pandemic, TISCs around the world achieved extraordinary results. Not only have new TISCs been set up, but existing TISCs have also increased the number and type of services they offer, from basic assistance in using patent databases to value-added services in the area of patent analytics, IP management and technology transfer.

Figure 1. Number of TISCs providing different types of services



Source: TISC Directory, 2021

Since the TISC program was launched in 2009, 88 countries, of which 31 are least developed countries, have signed service-level agreements with WIPO to develop national TISC networks. In 2021, eight new countries joined the TISC program (Chad, Gabon, Ghana, Lesotho, Liberia, Syria, Kazakhstan and Turkmenistan) and two countries (Sierra Leone and Sudan) initiated the steps to sign a service-level agreement with WIPO. Existing TISC networks also continued to expand during 2021 (see figure 2) and are becoming increasingly sustainable (see figure 3).

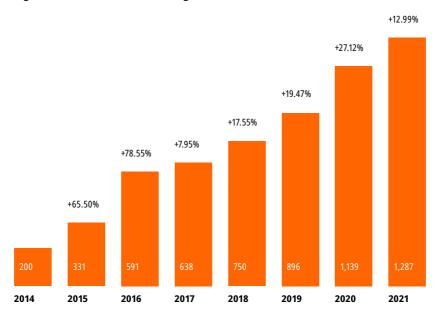


Figure 2. Number of TISCs and growth over time

Source: TISC Directory, 2021

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 service it provides. These levels also provide insights into a TISC's future requirements for development to increase impact. The levels are as follows:

- Maturity level 1: Countries that have signed a service-level agreement 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., drafting patent landscape reports.

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

Out of the total of 88 TISC national networks, 42 were considered to have reached at least maturity level 1 at the end of 2021. As highlighted in figure 3, there are now four networks at maturity level 1, 29 networks at maturity level 2, and nine networks at maturity level 3.

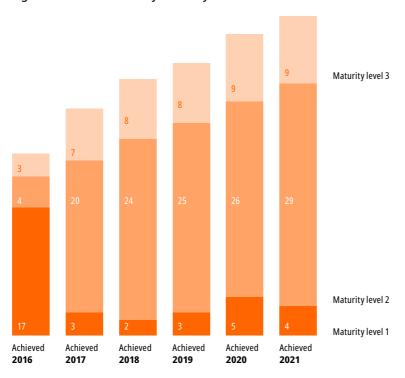
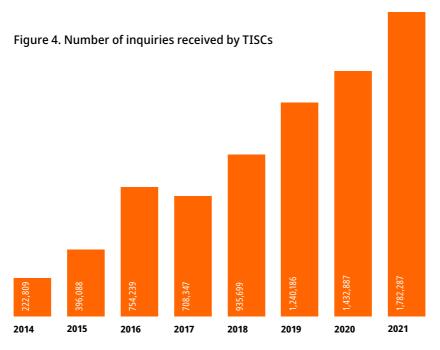


Figure 3. TISC networks by maturity level

Highlights from national TISC networks

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 had received an estimated 1.7 million inquiries in 2021, representing a 24 percent increase from the reported figures for 2020.



Source: Questionnaire on Progress and Needs Assessment, December 2021

Algeria: With 15 new TISCs in 2021 bringing the total number of TISCs in Algeria to 95, TISCs received and responded to over 6,200 requests for support and patent searches.

China: The fourth batch of 50 TISCs joined the TISC network in 2021. A total of 101 TISCs have been established in China to provide innovation support services such as patent searches, patent analytics, IP management and IP commercialization.

Colombia: The national TISC network in Colombia comprises 32 TISCs distributed across the national territory, with nine regional TISCs, two TISCs established in R&D centers, 19 in universities and two in chambers of commerce. In 2021 they received and responded to over 11,600 requests for consultation on different IP topics and issues.

Costa Rica: During the period under review, the TISC network responded to over 15,400 inquiries related to several modalities of IP, including patents, trademarks, utility models, industrial designs, and copyright and related rights.

Dominican Republic: The TISC network reported conducting 68 searches on patents, industrial designs and trademarks, and responding to over 450 requests for inquiries related to various services provided by TISCs.

Ecuador: In 2021, the TISC network conducted 52 state of the art searches, mainly in the areas of biotechnology, engineering, agrochemistry and pharmaceuticals/chemicals.

Egypt: The TISC network reported a 30 percent increase in monthly visits to TISCs, from 500 in 2020 to 600 in 2021.

Honduras: The TISC network reported providing 24 consultations to different national centers for entrepreneurial development on various topics, in particular patent information and access to patent and non-patent literature.

Jordan: In Jordan, the number of requests and visits to TISCs doubled from the previous year, from 150 per month to 300 per month.

Kyrgyzstan: The 24 TISCs established in all the regions of the country received a large number of requests from researchers, inventors and small and medium-sized enterprises (SMEs) in 2021, and responded to 429 inquiries about the IP legislation in Kyrgyzstan, 758 inquiries on access to and use of patent databases, 267 inquiries on access to non-patent information resources, and 65 requests for support on the registration and filing of IP rights applications.

Mongolia: A high increase (more than 500 percent) was recorded in the number of patent searches (855) carried out in 2021 by the 15 TISCs in the network, in comparison to the previous year (135 searches).

Peru: TISCs in Peru provided over 7,900 services to their users in 2021, more than doubling their objective of 3,000 for the year. Basic services are provided by 72 percent of TISCs in the country, and 42 percent also provide value-added services.

Saudi Arabia: The expansion of the TISC network, from 27 institutions in 2020 to 38 in 2021, was mirrored by an increase in the number of monthly visits recorded in 2021, from 41 the previous year to 99. To support TISCs in managing requests and in managing the development of knowledge and skills, the TISC network also launched an internal portal for TISC staff.

Ukraine: The TISC network responded to 976 requests and consultations in 2021. Regional TISCs provided 713 responses to user requests in 2021, up from 513 provided in 2020.

TISC training and awareness-raising: supporting local innovators

In addition to expanding their innovation support services to local users, TISCs continued to dedicate significant resources to self-development and awareness-raising activities, indicating increased sustainability and maturity levels. Many activities were shifted from traditional onsite to digital formats in response to the global pandemic.

Algeria: The TISC network organized 90 training activities on patent databases and patent information searches, training over 1,300 participants on these subjects.

Bhutan: More than 200 students, engineers and entrepreneurs were trained by the Department of Intellectual Property (DIP) of Bhutan, the TISC focal point. Two TISC staff also successfully completed the Advanced International Training Program on Intellectual Property for Least Developed Countries organized by WIPO in cooperation with the Swedish Intellectual Property Office (PRV) and the Swedish International Development Cooperation Agency (Sida).

China: In 2021, the TISC network of China continued to offer online and onsite training to SMEs, researchers, students and other innovators, with 160,000 participants in attendance. A total of 320 TISC staff participated in WIPO distance learning courses, and over 1,600 TISC staff participated in 13 online training sessions on patent information, introduction to patent analytics, and IP rights protection and utilization. Over 800 participants from different TISCs also attended a TISC seminar to exchange their ideas on the development of the TISC network in China, and 19 case studies from TISCs were selected for inclusion in the China Intellectual Property Information Service Case Collection.

Colombia: The TISC network organized over 250 awareness-raising activities, reaching over 6,000 participants, and over 390 workshops, with over 10,000 participants. Training activities included various topics related to patents, trademarks and industrial designs, and TISC services relating to these.

Costa Rica: The TISC network organized 110 training activities related to various services provided by TISCs, with over 300 participants.

Cuba: The TISC network organized 18 training activities covering various issues related to IP, in particular patent analytics, technology transfer and support to SMEs in the formulation of their IP strategy.

Ecuador: The TISC network organized 37 training activities in 2021, reaching over 1,200 professionals and students. The National Network of Ecuadorian Research and Education (CEDIA), a member of the TISC network, also supported the organization of an IP Week around World IP Day to bring together IP experts and innovators in the country.

Egypt: In collaboration with the Egyptian Patent Office and local research and educational institutions, the Academy of Scientific Research and Technology organized nine online and onsite training activities and awareness-building events on the role of IP in innovation and economic development, an overview of patent databases and searches, and IP commercialization. Of TISC staff, 80 percent also followed distance learning courses offered by the WIPO Academy on intellectual property, patents and patent information search.

Ethiopia: The TISC focal point at the Ethiopian Intellectual Property Office provided training to universities, technical and vocational education and training institutions, and research institutions hosting TISCs on a wide range of topics, including IP, patent search, patent drafting and technical transfer. Four universities, a new technical and vocational education and training institution, and a new research institute joined the TISC network during the year.

Honduras: Over 200 people benefited from training organized by the TISC network in 2021. Topics included accessing and searching patent databases, support to innovation and business development (including participation of TISC focal points in the focal group on technological innovation in the national education system), and specific activities targeting startups and businesses in Honduras.

India: In 2021, 787 IP rights-awareness events were conducted, and a specific training session on IP licensing was organized for the TISC network in India to support the development of knowledge and capacities in this area.

Iran (Islamic Republic of): the Intellectual Property Center (IPC) of the Islamic Republic of Iran, focal point of the national TISC network, has identified 19 potential TISC host institutions and organized a number of workshops since the establishment of the network in 2017, with a focus on patent drafting in 2021.

Jordan: In addition to regular training activities, the TISC network launched an annual competition for young innovators aged 10 to 17 on industrial designs.

Madagascar: Despite the pandemic's impact on the activities of the TISC network, which is one of the largest in the region with 73 TISCs, it organized 20 training and awareness-raising activities.

Malaysia: The TISC network, which grew from 15 to 19 institutions in 2021, organized and supported 20 training activities in the country, mainly on technology transfer, IP commercialization, IP valuation and innovation during the pandemic. Over 60 TISC staff also participated in distance learning courses offered by the WIPO Academy.

Morocco: 1,330 members of the TISC network, including TISC staff, researchers and students were trained through WIPO distance learning courses on patents (38 percent), patent drafting (24 percent), patent information searches (22 percent), IP management (7 percent) and other IP-related online courses.

Pakistan: The Intellectual Property Organization of Pakistan (IPO-Pakistan), focal point of the TISC network, organized 20 capacity-building sessions on IP and patent information with TISCs. The network attracted seven new universities in 2021, which brings the total number of TISCs in Pakistan to 46.

Peru: By the end of 2021, 62 TISC staff had been trained on patent information, patent searches and other IP-related aspects.

Russian Federation: The TISC network celebrated its 10-year anniversary and organized an online meeting to discuss how to strengthen cooperation and professional growth of TISC staff, as well as how to improve the level of services provided by TISCs in 2022. A competition for educational online projects among TISCs in the Russian Federation was also held to raise awareness about IP on the internet; seven TISCs (Belgorod, Vologda, Voronezh, Kaluga, Kurgan, Nizhny Novgorod and Ukhta) submitted applications. In total, 14 webinars were also held during the year, reaching over 3,000 participants.

Saudi Arabia: More than 36 specialized online training programs on IP were offered to TISC staff in 2021, with over 1,000 attendees. Around 10 specialized training programs were also developed with the Saudi Authority for Intellectual Property (SAIP) Academy. IP clinics were also organized by SAIP to support the development of knowledge and skills of TISC staff, including on patent drafting, filing, licensing, commercialization and database searches. TISC staff were also encouraged to participate in the WIPO Academy distance learning programs. In 2021, Saudi Arabia represented the third largest group in terms of TISC participants in these courses.

Tunisia: With 12 new TISCs in 2021, bringing the total number of TISCs to 22, six onsite workshops were organized on patent databases and patent information searches, training over 100 participants.

Ukraine: In 2021, the central TISC organized 13 events and webinars, and local TISCs organized 39 events and training activities. The TISC network also promoted the participation of Ukrainian institutions in Research4Life, a joint initiative of several United Nations agencies including WIPO's Access to Research for Development and Innovation (ARDI) program, which aims to provide institutions in lower income countries with access to academic and professional peer-reviewed content.

Uzbekistan: With eight new TISCs established in 2021, bringing the total network to 28 members, 47 training seminars were organized to train TISC staff on patent databases and patent information search, and to strengthen their knowledge of patent drafting and filing procedures.

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 practice to help TISC networks become more efficient and deliver targeted services have flourished globally. Networks were established in Africa, Asia and the Pacific, and Latin America and the Caribbean, and ongoing discussions were held to strengthen cooperation in other regions, for example among Arab countries and countries in Central Asia.

In September 2021, WIPO organized an online Sub-Regional Meeting for the Development of TISC Networks in **Central Asia** in collaboration with the State Agency of Intellectual Property and Innovation under the Cabinet of Ministers of the Kyrgyz Republic (Kyrgyzpatent). Representatives from Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan participated in the meeting and shared experiences and lessons learned in establishing and managing national TISC networks, aiming to increase exchanges among TISC networks in the region.

In October, WIPO organized a virtual training course for members of the regional network in **Central America and the Dominican Republic (CATI-CARD)** – Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama – in cooperation with the Registry of IP of Guatemala. The course focused on freedom to operate search and on using inventions in the public domain, supported by digitally available teaching resources such as WIPO guides. Over 70 participants (mainly from universities and research and development centers representing the different national networks) attended the event.

2021 also marked the launch of the first-ever virtual Global TISC Conference, jointly organized in collaboration with the **China National Intellectual Property Administration (CNIPA)** from November 29 to December 1. With more than 950 participants from 98 countries, the conference explored the role of TISCs in facilitating technology transfer and in contributing to technology-based solutions to social and economic issues faced by communities worldwide, with inputs from leading experts and representatives from TISC networks, academia, industry and innovation players in technology transfer structures. The conference also provided an opportunity to share experiences and best practice for improving the effectiveness and sustainability of TISCs, and explored how to deepen their networking on a global scale. A video available online and launched at the virtual Global TISC Conference also compiled greetings and contributions from over 100 TISCs from 25 countries.

Bilateral initiatives also strengthened cooperation in TISC networks, and one such initiative was the collaboration between the **Russian and Kyrgyz TISC networks**, where the TISC Association of the Russian Federation supported a roundtable on "Intellectual property as a regulator of the quality of education and the economy of science-intensive technological development of universities" in Kyrgyzstan. The Federal Institute of Industrial Property (FIPS) also organized, together with the Autonomous Non-Profit Organization "Electronic Education for the Nanoindustry (ANO "eNano") – an online seminar on "Intellectual Property Protection Strategies: Identifying and Solving Problems, Building a Management System".

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.

From research and development to IP creation, product and service design, and value creation, TISCs offer a range of services that can benefit innovators including SMEs at various stages of the innovation process.

On April 26, 2021, World Intellectual Property Day shone a light on the critical role of SMEs in the economy with the publication of case studies telling the stories of SMEs around the globe that had used IP rights to build stronger, more competitive and more resilient businesses.

One such case study showed how Qingdao Aibo Detection Technology Co., Ltd, an SME based in Qingdao, **China**, which produces and sells medical devices, biological testing products and in vitro diagnostic reagents, greatly benefited from the support of the TISC in Qingdao Municipal Intellectual Property Service Center. It generated value from its IP and made IP a central component of its business model, with a portfolio of 31 granted patents and utility models and 13 pending applications. By turning IP into capital to obtain financial support, the company achieved robust and sustainable development (read the full case study here).

Algeria: 50 percent of patent applications and 65 trademark and design applications were filed with the support from TISCs in 2021.

Benin: The TISC network of Benin organized training for innovators and startups on creativity, innovation and IP commercialization as well as a number of awareness-raising activities throughout the country, and recorded an increase in the number of patent and trademark applications filed with the support of TISCs in 2021.

China: The TISC network of China is dedicated to supporting inventors in filing patent and other IP rights applications. As examples, the TISC of Jiangsu University supported one of its research team on agriculture equipment by designing eight patent portfolios and filing 125 local patent applications, as well as 16 Patent Cooperation Treaty (PCT) applications. The TISC of Hainan Normal University National University Science and Technology Park offered free services on filling trademark, patent and utility model applications for enterprises. The TISC of Guangdong Intellectual Property Protection Center helped 187 enterprises to obtain geographical indications that covered 35 products among 14 cities in Guangdong province.

Colombia: The TISC network filed 109 patent applications, 259 industrial designs applications and 1,972 trademark applications in 2021.

Costa Rica: In Costa Rica, 627 new patent applications in different fields of technology (chemistry, mechanics, pharmaceuticals and new instruments) were filed through the TISC network.

Dominican Republic: In 2021, 10 new patent applications and utility model applications were filed by the TISC network.

Ecuador: Nine patent applications, one utility model and three industrial design applications were submitted to the National Service of Intellectual Rights (SENADI) through TISCs.

India: In 2021, 332 patent applications were filed – an increase of 23 percent since 2020. Additionally, 403 applications for trademarks, design rights and copyright were also filed.

Jordan: In 2021, residents filed 39 patent applications and 17 PCT applications.

Morocco: Over 150 patent applications (including national and PCT applications) were filed with the support of TISCs in Morocco in 2021.

Pakistan: In 2021, 422 patent applications were filed by indigenous inventors in Pakistan, of which 184 were filed by institutions within the TISC network.

Peru: TISCs supported the filing of 295 resident patent applications in 2021.

Philippines: IP filings among TISCs in the Philippines bounced back from a slump in 2020 to approach pre-pandemic levels, with 1,208 filings in 2021, of which 197 were for patents, 565 for utility models, 96 for trademarks, 69 for industrial designs and 281 for copyrights. TISCs in the Philippines succeeded in commercializing 64 IP assets, including 15 patents.

South Africa: Over 1,000 patent and 900 design applications were filed by residents in 2021, with the support of the TISC network.

Uganda: In Uganda, while there was a decrease in the overall number of patent applications due to the pandemic, an increase was reported in the filing and granting of utility models.

Ukraine: About half (49.8 percent) of the requests to the central TISC were for trademark rights, with the rest comprising issues related to doing business as an SME (funding sources, product distribution, domain disputes, etc.) and other IP rights.

Uzbekistan: TISCs provided advice and over 300 consultations on IP applications in 2021, resulting in 262 patent applications filed with their support and 104 being granted patents.

TISCs expanding the depth and range of their services

The number of sustainable national TISC networks and the demand for TISC services continues to grow. At the same time, TISCs have been expanding their range of services to help local users better exploit their innovative potential throughout the stages of innovation. Technology transfer, commercialization and IP management support services in particular are creating real value, as evidenced by a rise in the number of TISC initiatives to help local researchers, inventors and entrepreneurs bring inventions to market.

Botswana: In addition to training on IP and commercialization organized by the Botswana Innovation Hub for the TISC network, TISCs had their first training activity on the WIPO Training Needs Assessment (TNA) Manual and Toolkit (see Useful links) to help them assess training needs in the area of IP management and technology transfer and establish training plans for the various stakeholders involved in the national innovation value chain.

China: The national TISC network continued to actively facilitate IP commercialization and utilization. In 2021, TISCs in China received and completed over 3,000 technology transfers. The TISC of Yunnan Institute of Science and Technological Information also developed a China South and Southeast Asia International Technology Transfer Trading Platform to enhance cooperation between domestic and foreign enterprises, research institutions, universities and technical experts.

Cuba: The national TISC network reported the preparation of patent landscape reports on state of the art searches in the fields of electronics, waste treatment, oil, chemistry, public health and pharmaceuticals, and renewable energies.

Ecuador: The National Network of Ecuadorian Research and Education (CEDIA), a key member of the national TISC network, publishes a regular technology watch magazine (*CONNECT*) that monitors developments in various areas of science and technology to inform research, business and policy decisions, and support technology transfer in these areas.

Guinea: The Industrial Property and Technological Innovation Service as well as the Higher Institute of Technology of Mamou (IST) of Guinea shared their experience in developing an automatic health protection kit, which was instrumental in the fight against COVID-19 in Africa during the hybrid 27th session of the Committee for Development and Intellectual Property (CDIP), which was attended by more than 80 member states of WIPO.

India: TISCs established 88 IP rights cells in academic institutions across India. The TISC hosted in the National Research Development Corporation in Visakhapatnam signed 13 technology transfer

agreements in 2021, and the TISC hosted in the Punjab State Council for Science and Technology (PSCST) successfully transferred a patented "hybrid kiln" technology to 20 industrial partners.

Kyrgyzstan: TISCs will play an active part in the implementation of the Kyrgyzpatent project for the development of business incubators and startup accelerators based in universities and research institutes of Kyrgyzstan to support youth innovation projects and startups.

Madagascar: The TISC network evaluated 235 medicinal plants, of which 76 were for the treatment of respiratory diseases and 159 were for the treatment of diarrhea.

Morocco: Seven out of the 53 TISCs in Morocco joined the TISC 2.0 Convention, which focuses on developing value-added services in the area of technology transfer and commercialization. IP policies for universities and research centers were also at the heart of Morocco's action plan in 2021 after a successful pilot project in 2020 with four institutions. In 2021, 14 institutions received support to draft their IP policies. Eleven TISC staff also provided pro bono legal assistance and support on patent drafting in the framework of the WIPO Inventor Assistance Program, which aims to help inventors with limited financial means in participating countries such as Morocco.

Pakistan: TISCs contributed to the commercialization of 31 products/technologies/designs developed by researchers in TISC host institutions, including by providing advice on IP protection and management strategies.

Peru: With an increase in the patenting activity of TISCs, the TISC network will increasingly focus its training on technology transfer, IP commercialization and marketing, and will strengthen partnerships with industry to achieve technology transfer that meets market demand.

Philippines: The Intellectual Property Office of the Philippines (IPOPHL) rolled out its ITSO 2.0 program, providing new guidelines for the operation of TISCs in the Philippines and clustering TISCs into Bronze, Silver, Gold, and Platinum groups in line with services provided and results achieved. TISCs in the Platinum group, for which nine TISCs qualified in 2021, must have drafted and filed at least seven patents and successfully commercialized an IP asset. TISCs in the Philippines succeeded in commercializing 64 IP assets, including 15 patents, in 2021. New guidelines for state universities and colleges in the Philippines launched by the Commission on Higher Education, supporting and rewarding IP protection and commercialization, together with existing Institutional IP Policies in place among all TISC host institutions are expected to reinforce IP filing and commercialization.

Russian Federation: TISCs worked to carry out a coordinating function related to the innovative and technological development of the regions in the Russian Federation, including studying the technological profile of the region, assessing potential technological areas for further financing, and forming a forecasting system for industries (markets) of high-tech products (goods and services).

South Africa: With two new TISCs joining the network in 2021, bringing the total number to 18, and with 15 more in the pipeline, the network focused its training of TISC staff on IP commercialization and technology transfer, and established a roadmap for future developments in this area.

Ukraine: TISC staff were involved as experts in a project for creating a digital platform for the commercialization of IP rights, and participated in joint discussions between the Ministry of Economy Reform Support Team, the Ministry of Digital Transformation and state enterprise "Prozorro".



WIPO resources supporting TISCs

As TISC networks expand and provide more services to local innovators, WIPO continues to support TISCs. It has developed a range of initiatives and resources to empower TISCs, including digital platforms such as WIPO INSPIRE, which provides a unique blend of information and knowledge in different areas of IP, publications such as WIPO Technology Trends and other guides, and training sessions.

Digital platforms and tools provide access to information

Access to Specialized Patent Information (ASPI)

ASPI enables institutions in developing countries to obtain free or low-cost access to commercial patent database services. It is made possible through a unique public-private partnership with nine leading patent database providers that offer advanced tools to access high-quality technical information contained in patent documents.

Since its launch, the number of registered institutions has grown by more than three times.

Registered institutions Active institutions

Figure 5. Number of registered and active institutions in ASPI

Source: ASPI database

Access to Research for Development and Innovation (ARDI)

ARDI aims to increase the availability of scientific and technical information in developing countries through a public-private partnership with the publishing industry. ARDI provides free or low-cost access for eligible institutions in developing countries to academic and professional peer-reviewed content. The program is also part of the Research4Life partnership, a joint initiative of several United Nations agencies, private sector enterprises, non-governmental organizations and academic institutions, which provides researchers in 125 developing countries and LDCs with free or low-cost access to up to 30,000 journals and up to 131,000 books and reference works in the fields of health, agriculture, environment, applied sciences and legal information.

A new ARDI portal was launched in 2021 with a redesigned interface and improved features. Users can now create their own account and save searches, bookmark favorite content, view their search history and create search alerts. It is optimized for mobile devices and is responsive to different-sized screens.



Source: ARDI user login data

WIPO INSPIRE

WIPO INSPIRE is a global reference for innovation, helping innovators and entrepreneurs make informed decisions at critical junctures throughout the innovation cycle. It is a one-stop platform integrating expert and social content on patent databases, patent registers, patent analytics, technology transfer and Institutional IP Policies, providing a unique blend of information and knowledge on resources, tools and good practice in these areas.

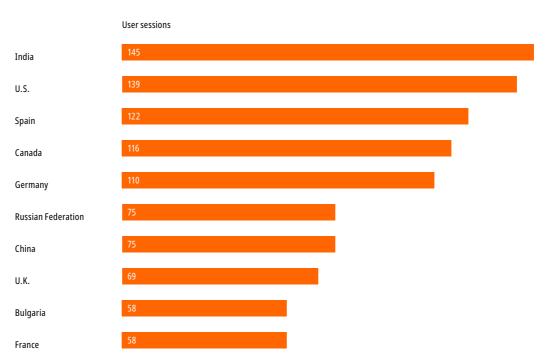
WIPO INSPIRE was updated and improved in 2021 to offer researchers and innovators up-to-date information and a better user experience. A new seamless environment was developed that integrated tools including eTISC and the Patent Register Portal so users can easily access the information in one place.

WIPO INSPIRE was accessed by over 11,487 users during 2021.

Figure 7. WIPO INSPIRE usage

Page views	18,818	
Users	11,478	

Figure 8. Top 10 countries accessing WIPO INSPIRE



Patent Register Portal

The Patent Register Portal is a gateway to online patent registers and gazettes and to legal statusrelated information from over 200 jurisdictions and patent information collections. Information on the portal is accessed using a searchable map and table with help files on detailed legal statusrelated information.

The jurisdiction files in the Patent Register Portal were reviewed and updated to ensure accuracy and completeness of content, with links to online patent registers and databases.

Figure 9. Patent Register Portal usage

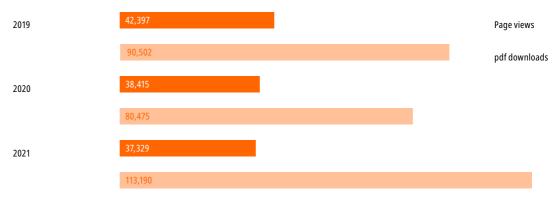
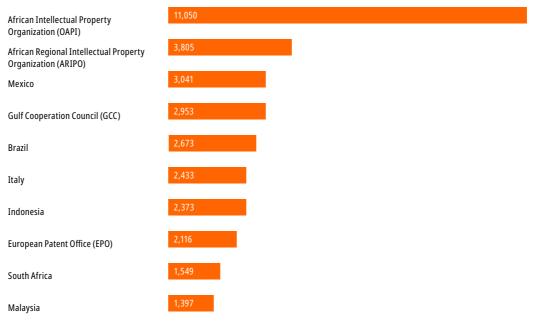


Figure 10. Top 10 report downloads from the Patent Register Portal



eTISC knowledge sharing platform

eTISC is a virtual social platform that gives the TISC community and IP users space to interact and share knowledge and ideas in a secure environment.

Main features of the platform include:

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

The platform was improved to provide a more interactive experience, and users have been receiving regular news items relating to a wide range of IP matters relevant to TISCs, but also other topics of interest to support the work of TISCs.

During 2021, eTISC was accessed by over 1,000 users, with most users originating from India.

Figure 11. eTISC usage



Egypt

Saudi Arabia

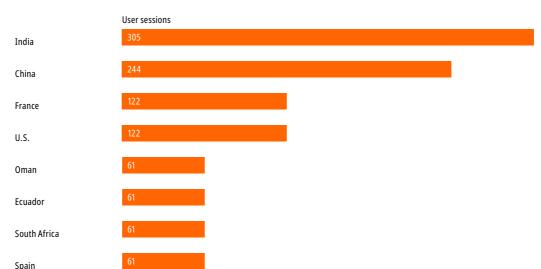


Figure 12. Top 10 countries accessing eTISC

TISC Project and Performance Management platform

The TPPM platform is designed to help TISC coordinators effectively manage their national projects and support local and regional networks to coordinate and interact with each other in a better and more efficient way. The TPPM platform also enables WIPO to follow up on TISC projects in its member states to assess and respond effectively to their needs for assistance and capacity building.

The TPPM platform will be rolled out for TISC networks in multiple stages through 2022. Webinars and training sessions will be organized by WIPO for national TISC focal points and staff.

Publications boost capacity

WIPO has created a number of publications to boost capacity building among TISCs worldwide. These publications are key reference sources for a range of subject areas, including patent documentation and databases, patent searches, patent analytics and TISC management.

The publications are available in multiple languages and include brochures and guides as well as WIPO patent landscape reports, which examine patent filing trends and provide technical and business information. Patent landscape reports cover topics such as public health, food and agriculture, environment, energy and disabilities – areas of particular relevance to developing countries. Moreover, resources such as those developed to guide TISCs in drafting patent landscape reports contribute by reinforcing quality and quantity of value-added services provided by TISCs, strengthening their overall impact and sustainability.

Developments in patent analytics

A series of WIPO patent analytics activities, including the development of specific subject-matter publications and methodological resources, keep TISCs and patent information users informed on trends across different technologies. In addition, they help TISCs develop and enhance their patent analytics skills for providing high-quality analytical services.

WIPO Technology Trends: The *WIPO Technology Trends* report is a flagship publication of interest to industry, academia, policymakers and general readers interested in innovation. Based on patent and non-patent data, it shows trends in different technologies, case studies, insights and perspectives

from leading experts, and includes policy. *WIPO Technology Trends 2021* was launched in March 2021, including a fully accessible EPUB3 version, and was dedicated to assistive technology. This includes assistive products and technologies to address functional limitations related to mobility, cognition, communication, vision, hearing, self-care and the built environment.

The report identified emerging assistive technologies and used a modified version of the NASA Technology Readiness Level methodology and impact criteria to assess how close the technologies are to commercialization, and the factors influencing the time for a product to reach the market. The results were presented in an accessible and interactive radar visualization, which uniquely combined the patenting activity with the technologies.

The report further analyzed the use of industrial designs by top patent applicants to show how different IP rights can complement each other as part of an IP portfolio. The results of the report were made available in two interactive visualizations for conventional and emerging assistive technology, allowing the audience to filter and view the results by the fields of their interest (applicant type or name, applicant's or inventor's location, category of technology, etc.). The WIPO Technology Trends reports were downloaded over 278,000 times in the period from 2019 to the end of January 2022.

During 2021, WIPO organized several events to promote the report and its findings, which are available in the eTISC platform, ranging from workshops to podcasts. The findings of the report also contributed to the World Health Organization *Global Report on Assistive Technology* (GReAT).

Patent landscape reports series: Two new patent landscape reports were prepared in 2021: the first one on COVID-19-related vaccines and therapeutics (published in March 2022) aims to provide some preliminary observations on the use and response of the patent system during the pandemic, and technology areas of patenting activity. The second report is on hydrogen technologies in the field of transportation and was launched during an international conference in Bratislava, Slovakia, in May 2022. Patent dataset and search queries from both reports will also be made available, while documentation will be made available for users who wish to use PATENTSCOPE to search for COVID-19 or SARS-COV-2, or vaccine-related patent documents, with some guidance on the usefulness of different patent classification symbols.

Update of patent analytics methodological resources: The *Manual on Open Source Tools for Patent Analytics*, first published in 2016, was updated in 2021, while the *Patent Analytics Handbook* will be updated in early 2022. The updated versions cover additional topics and tools, and include changes in tools that have taken place since their original publication. Both updated resources, along with an online tutorial on patent analytics, are available on a collaborative online space (see Useful links).

Developments in other areas

Following the publication of the WIPO guides on identifying and using inventions in the public domain in 2020 and the development of a complementary toolkit providing practical tools for gathering and structuring data as the basis for decision-making within the process for using inventions in the public domain and new product development, the TISC program developed a digital training package supporting training modules on each of the practical tools included in the toolkit. The digital training package was piloted in two TISC networks – Colombia and South Africa – in 2021, and the feedback gathered will be included in the revised package to be further refined and developed in 2022, before it is rolled out to the global TISC community.

A *Technology Transfer Training Needs Assessment Manual and Toolkit* for assessing training needs and mapping innovation value chains was also developed under the Development Agenda Project on Intellectual Property Management and Technology Transfer: Promoting the Effective Use of Intellectual Property in Developing Countries, Least Developed Countries and Countries with Economies in Transition. The project was successfully completed in December 2020 and the manual and toolkit was finalized in 2021 and published in February 2022. The aim of the manual and toolkit is to enable the assessment of training needs for organizations involved with intellectual property management, technology transfer and commercialization/utilization. The resulting training needs

assessment informs the design of an effective training program to address the identified gaps in skills and competencies. The manual and toolkit targets readers with limited knowledge of training needs assessments, enabling them to perform training needs assessments to establish training plans for the different organizations and people within the national innovation value chain (for example, funders, developers, managers and users of IP and associated support institutions).

Training expands knowledge and skills

WIPO training supports TISC staff knowledge and skills, building their capacity to provide a range of high-quality services to local innovators. Topics include basic concepts and skills in patent searching; types of patent searches, including state of the art, novelty and freedom to operate; patent analytics and IP management. Training formats consist of workshops and seminars with a focus on training of trainers, distance learning in cooperation with the WIPO Academy, "Ask the Expert" sessions and eTISC platform webinars.

In light of the COVID-19 pandemic, training and capacity-building activities continued to be delivered digitally in 2021, and new modes of delivery were explored, including hybrid meetings and the piloting of gamification of training in the area of patent analytics, with the development of a "serious game" to promote critical thinking and decision-making skills during the patent analytic process.

The TISC program organized 24 activities for national TISC networks in 2021, two regional events for TISC networks in Central Asia and in Latin America and the Caribbean, and the first virtual Global TISC Conference, which brought together 950 participants from 98 countries.

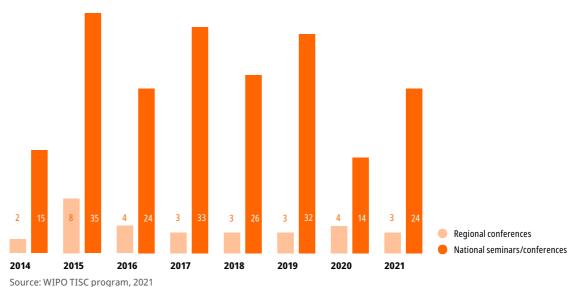
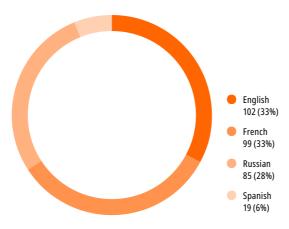


Figure 13. Number of national and regional conferences organized

The **e-Tutorial on Using and Exploiting Patent Information** is a free online platform to help innovators learn how to use the wealth of technology information in patent documents to boost their own research and development. It comprises three sections: patent basics, patent search and retrieval, and patent analysis.

The e-Tutorial, which was launched in 2020 as a distance learning course (DL-177) by the WIPO Academy, is available in English, French, Russian and Spanish, with Arabic and Chinese versions to follow soon. The latter two are already available as self-paced learning resources on the Arabic and Chinese versions of the WIPO TISC webpage.

Figure 14. e-Tutorial registrations by language



Source: WIPO Academy, 2021

In 2021, 3,477 TISC staff participated in **distance learning courses offered by the WIPO Academy**. More than half of those registrations (1,956) were for advanced courses, with a notably large participation from TISCs in Morocco, the Russian Federation and Saudi Arabia (the top three countries), and a near-equal distribution of female and male participants.

Figure 15. TISC staff participation in advanced courses of the WIPO Academy, by course

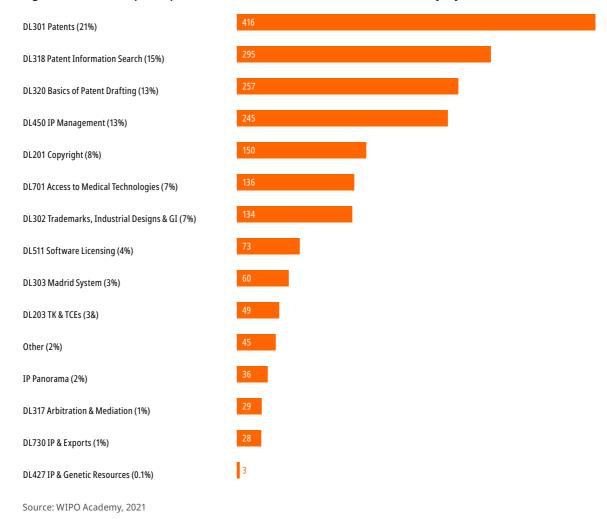
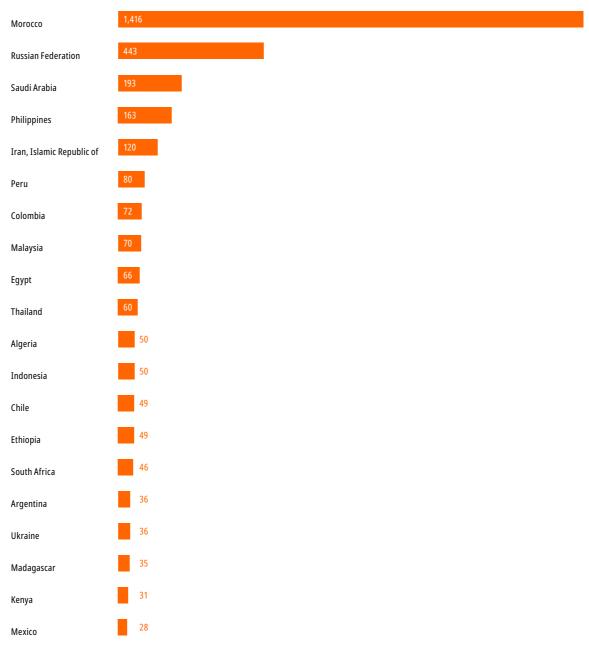
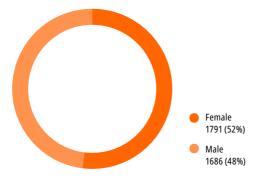


Figure 16. TISC staff participation in WIPO Academy training, by country



Source: WIPO Academy, 2021

Figure 17. TISC staff participation in WIPO Academy training, by gender



Source: WIPO Academy, 2021



Integrating technology transfer into TISC services

With specialized resources in the area of technology transfer being added to the TISC program in 2021, WIPO's support for TISCs has become broader, enabling them to assist local innovators and develop the complete innovation ecosystem from research to product commercialization.

WIPO started comprehensive work on broadening the capacity of TISCs and other innovation stakeholders to develop innovation ecosystems that would support the innovation journey from creators to users. The approach adopted was to address the needs of stakeholders related to the technology transfer legal framework on the institutional level. This involved the development of Institutional IP Policies to enhance the capacity of TISCs and other technology transfer structures to provide a broader range of more sophisticated services to clients – such as IP marketing, valuation and licensing negotiation skills. The objective was also to strengthen capacities of TISC staff and other technology management professionals in the area of technology transfer and IP commercialization through training programs, national and institutional projects, and by updating or creating the new innovation support resources – the technology transfer webpage, advanced guides and databases.

The inclusion of technology transfer aspects in the TISC program was key to the WIPO Global TISC Conference, where one day of the conference was devoted to the issue of international technology transfer collaboration and networking as a way to help new markets and partners access research outcomes. In addition, the issue of Institutional IP Policies was introduced to TISC participants, as well as basics of IP valuation.

Publications, digital platforms and tools

Anticipating the needs of TISCs and other innovation structures to align their activities to post-COVID-19 trends and to provide adequate support to innovators engaged in current and future pandemics, adaptation and creation of new content for the following guides was announced, to be finalized in 2022: the Successful Technology Licensing Guide and the IP Valuation General Guide with an IP Valuation Booklet for the Biotechnology Sector. These are intended to be practical and user-friendly guides on how TISCs and other innovation structures can apply negotiation and valuation principles in their daily work.

The *Technology Transfer Primer for the Biotechnology Sector* was developed to help biotech innovation stakeholders understand the environment needed for sustainability in this sector, as well as challenging issues such as the role of IP in the creation, protection and transfer of research outcomes from biotech laboratories to public and private users – bearing in mind that this sector is highly regulated by governmental and international rules and regulations. It provides templates and example agreements that have been utilized in successful biotechnology agreements.

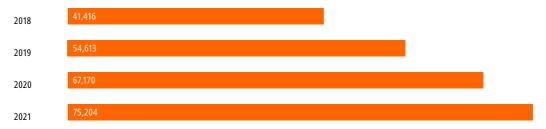
Work on the *Incentives Guide for Researchers* was continued (to be published in 2022). The guide aims to provide an introduction to motivations, rewards and incentives to boost researcher engagement in technology transfer and commercialization – for the benefit of society, the institution and the researchers themselves. The guide describes many aspects of incentives for researchers, what they are and how to organize them. It also provides inspiring examples of incentive policies from universities and public research institutions all over the world.

In 2021, major work was done on the creation of the new IP and Technology Transfer webpage that hosts a number of technology transfer success stories, for example on newly developed IP policies in universities in Algeria and Jordan, and on the input of publicly funded academic institutions in response to COVID-19 (Tallinn University invention).

The WIPO Database of IP Policies provides links to existing IP and related policies of universities and research institutions worldwide, allowing TISCs to learn from others. In 2021, there were 75,204 unique page views and 48,974 users of the database. It was also further expanded with 153 new Institutional IP Policies and five new national model IP policies, and now contains over 700 examples of Institutional IP Policies. A new search functionality was also added, called "consultancy",

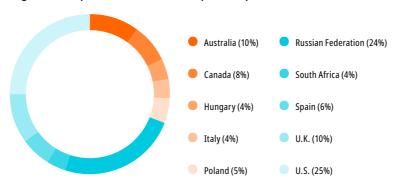
and new types of policies were included: "National Model IP Policies for Universities and Research Institutions", "Consulting Policies", "Conflict of Interest Policies", "Commercialization Policies", "Spinoff Policies", "Software Policies" and "Copyright Policies".

Figure 18. Unique page views of the WIPO Database of IP Policies



Source: WIPO Database of IP Policies

Figure 19. Top 10 countries with IP policies presented in the database



Source: WIPO Database of IP Policies

Figure 20. Collection of documents in the WIPO Database of IP Policies



Source: WIPO Database of IP Policies

The WIPO Intellectual Property Policy Template for Universities and Research Institutions, the Guidelines for Customization and the IP Policy Drafter's Checklist provide a good starting point for universities or research institutions who wish to create or enhance their IP policy and speed up the commercialization of promising inventions. In 2021, customized versions of the WIPO template and guidelines were created for the African countries, Belarus, Morocco, South Africa and Viet Nam.

In 2021, WIPO started the creation of a WIPO Copyright Policy Template for universities and public research institutions, with Guidelines for Customization. This template policy will focus on copyright,

especially regarding the use of copyrighted works created outside universities and public research institutions, and the use of copyrighted works via the internet.

WIPO created two standard questionnaires to tailor its support to universities and public research institutions: the Institutional Analysis Questionnaire aims to gather information on the institution's particular mission, needs and context, and the Legal Analysis Questionnaire is meant to gather information about the national legal framework for IP and technology transfer. In 2021, the questionnaires were updated and published on the technology transfer website.

Special projects

Phase I of the Eurasian Patent Organization (EAPO)/WIPO project on Enhancement of the Capacity of Techno Parks in the Region of Caucasus to Provide IP Commercialization Services to Innovation Stakeholders was finalized in 2021, and the analytic assessment report regarding the current state of IP commercialization in the regional techno parks was developed with recommendations on institutions that could benefit from WIPO's customized capacity-building program. The objective of the regional program would be to upgrade the existing capacity of techno parks to deliver IP commercialization services to their residents – SMEs, startups and research institutions in the EAPO member states.

After two years of intensive online work on the development of the Regional TTO Network of Baltic States – Estonia, Latvia and Lithuania – the Regional Collaboration Agreement was developed and is in the process of being signed by Baltic national TTO associations and consortia. It is due to be launched in September 2022, at the International Technology Transfer Conference in Lithuania.

In 2021 WIPO was leading Institutional IP Policy projects in the following countries: Algeria, Belarus, Egypt, Jordan and Tunisia. As a result 34 institutions drafted their IP policies and are in the process of finalization and adoption. Among them, seven institutions officially adopted IP policies, and it is expected that in 2022 at least 25 institutions will complete adoption.

Conferences and training activities

On December 14, 2021, WIPO and the European Commission's Joint Research Centre (JRC) organized the EU – Arab Countries Innovation Conference: Paving the Way for International Research Collaboration and Technology Transfer, addressing the need for stronger collaboration between research institutions of developed and developing countries. WIPO and the JRC envisaged a follow-up collaboration in this area, as it was agreed that international technology transfer collaboration is crucial to face global challenges. Research institutions and stakeholders must be ready to explore more systematic and sustainable institutionalized collaboration between two regions, and on the South-South level. The idea of using "scientific diplomacy" to overcome challenges was widely accepted.

There is increasing interest by academic institutions in developing capacity to respond to market challenges, for example by determining the value of early-stage technologies. In 2021 WIPO organized a series of IP valuation online training activities for innovation stakeholders in Ukraine, Uzbekistan and Colombia, providing theoretical explanations and practical coaching on real cases. In addition the training was organized on Open Innovation and IP Tools in Colombia.

Institutional IP Policy Training Programs were delivered in the framework of the national IP policy projects or as individual events, as was the case in the Dominican Republic and Nigeria. Based on a specific request from the TISC network in India, WIPO also developed a one-day online licensing course simulating a licensing negotiation based on a hypothetical case of renewable technology.



Looking ahead

WIPO's support for TISCs will continue to evolve and respond to local needs. New resources being developed to expand the capabilities of TISCs will help create and strengthen innovation ecosystems, motivating innovators to use IP for business growth and bringing their innovations to market.

The effective implementation of WIPO's TISC program is a key priority, and a major component of the assistance WIPO provides to member states. Creating and strengthening a positive environment for innovation and creativity is crucial to achieving the Sustainable Development Goals (SDGs). Since the adoption of the 2030 Agenda for Sustainable Development in 2015, the TISC program has noticeably progressed – not only in the number of TISCs and beneficiary countries, but also in its value-added services helping inventors, researchers and entrepreneurs unlock their innovative potential, foster innovation and encourage technology transfer, IP management and commercialization.

WIPO will continue to develop new resources to reinforce TISC capabilities worldwide, and to encourage universities and public research institutions to manage, access and share knowledge, technology and IP. Looking ahead, the following new resources are in the pipeline:

- Development of a TISC staff certification scheme to strengthen career development and ensure skills are retained in TISC networks, or at least in the field of IP rights.
- Development of new training material, exercises and datasets for patent analytics.
- Gamification in patent analytics training, to help TISC staff build their patent analytics skills and
 understand the reasons behind different choices in patent analytics. A "serious game" is being
 developed that uses a scenario in a digital board game environment to help participants practice
 what they have learned during training, improve their critical thinking and better understand
 the thought process during a patent analytics workflow. The game will be used in TISC training
 in 2022
- Establishment of a Patent Analytics Community of Practice for practitioners in IP offices, with the aim of advancing the field and producing publications on best practice to reinforce patent analytics skills
- Preparation of documentation to help patent information users wishing to carry out patent searches in the fields of COVID-19, vaccines, sequence listings and biotechnology.
- Rollout of the TPPM platform to support TISC focal points in coordinating and managing their national networks.
- Strengthening regional collaboration among Baltic States by supporting the establishment of a Regional TTO Network Agreement and providing the eTISC communication platform.
- Creation of a new webpage on technology transfer and IP, with explanatory video materials, case studies and successful stories.
- Enhancement of the WIPO Database of IP Policies, with new institutional and national model IP policies, as well as new search functionalities. Improved visibility of the website, taking into account the number of unique page views.

TISC program milestones



- Launch of TISC project
- Launch of ARDI



- Launch of ASPI
- Conclusion of first service-level agreement to implement a TISC network



- ARDI joins Research4Life partnership
- Publication of the first WIPO patent landscape report



- Launch of interactive e-Tutorial
- Inauguration of eTISC knowledge management platform

2013

- First ASEAN regional TISC meeting
- First "Ask the Expert" session on eTISC

2014

- TISC and patent landscape report projects become regular WIPO activities
- First use of open-source tools in a WIPO patent landscape report

2015

 Publication of Guidelines for Preparing Patent Landscape Reports

2016

- Launch of Development Agenda Project on the Public Domain
- Launch of the Inventor Assistance Program (IAP)
- Launch of TISC training on patent analytics
- Online publication of WIPO Manual on Open Source Tools for Patent Analytics

2017

- First TISCs start providing patent analytical services
- Approval of new Development Agenda Project on Technology Transfer and IP Management

2018

- First workshops on guides for identifying and using information in the public domain
- Launch of the Patent Register Portal

2020

2019

- Launch of WIPO Technology Trends 2019: Artificial Intelligence
- First training courses on technology transfer and IP management based on a new methodology for targeting training
- 1,000 TISCs established worldwide
- Launch of WIPO INSPIRE
- Publication of guides on identifying and using inventions in the public domain
- Launch of redesigned eTISC platform
- Launch of e-Tutorial as a certified WIPO Academy distance learning course
- Completion of Development Agenda Project on Intellectual Property Managament and Technology Transfer

2021

- First online Global TISC Conference
- Integration of specialized technology transfer resources into the TISC program
- New WIPO INSPIRE platform integrating the Patent Register Portal and eTISC
- Comprehensive review and update of the Patent Register Portal
- Development of new tools to support the management of national TISC networks
- Launch of WIPO Technology Trends 2021: Assistive Technology
- Update of the Manual on Open Source Tools for Patent Analytics

Useful links

WIPO Technology and Innovation Support Centers

www.wipo.int/tisc/en

WIPO Directory of Technology and Innovation Support Centers

www.wipo.int/tisc/en/search

WIPO INSPIRE

https://inspire.wipo.int

ASPI - Specialized Patent Information

www.wipo.int/aspi/en

ARDI - Research for Innovation

www.wipo.int/ardi/en

WIPO eTISC

https://etisc.wipo.int

Patent Register Portal

www.wipo.int/patent_register_portal

WIPO Technology Trends

www.wipo.int/tech_trends/en

Patent Landscape Reports

www.wipo.int/patentscope/en/programs/patent_landscapes

Patent Landscape Reports by Other Organizations

www.wipo.int/patentscope/en/programs/patent_landscapes/plrdb.html

WIPO Analytics

https://wipo-analytics.github.io

Intellectual Property and Technology Transfer

www.wipo.int/technology-transfer

Technology Transfer Training Needs Assessment Manual and Toolkit

www.wipo.int/publications/en/details.jsp?id=4586

Inventor Assistance Program

www.wipo.int/iap

Time- and Cost-Efficient Alternative Dispute Resolution of R&D and Technology Transfer Disputes for TISCs

www.wipo.int/amc/en/center/tisc

Technology and Innovation Support Centers (TISC) Webinars

www.wipo.int/meetings/en/topic.jsp?group_id=327

WIPO Academy Distance Learning Courses

www.wipo.int/academy/en/courses/distance_learning



World Intellectual Property Organization 34, chemin des Colombettes P.O. Box 18 CH-1211 Geneva 20 Switzerland

Tel: +41 22 338 91 11 Fax: +41 22 733 54 28

For contact details of WIPO's External Offices visit: www.wipo.int/about-wipo/en/offices

© WIPO, 2022



Attribution 4.0 International (CC BY 4.0)

The CC license does not apply to non-WIPO content in this publication.

Photo credits: © Abbie Trayler-Smith / Panos Pictures / Department for International Development via climatevisuals.org

WIPO Publication No. 1059/21E DOI: 10.34667/tind.46441 ISBN: 978-92-805-3397-2 (PDF) ISBN: 978-92-805-3398-9 (online)