

Technical Cooperation Document

I. Basic information for TC

▪ Country/Region:	Paraguay/CSC
▪ TC Name:	Enhancing Intellectual Property (IP) Management in Paraguay: IP digitization and implementation of paperless system
▪ TC Number:	PR-T1260
▪ Team Leader/Members:	Juan Pablo Ventura (IFD/CTI), Team Leader; Gustavo Crespi (IFD/CTI), Alternate Team Leader; Juyoon Sun (IFD/CTI), Yohana Gonzalez (IFD/CTI), Jorge Luis Gonzalez (VPC/FMP), Maria Soledad Vaesken(CSC/CPR), Jean Eric Theinhardt(IFD/ICS); Fernando Glasman (VPC/FMP) Alonso Chaverri Suarez (LEG/SGO)
▪ Taxonomy:	Client Support
▪ If Operational Support TC, give number and name of Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	06/19/2018
▪ Beneficiary:	Dirección Nacional de Propiedad Intelectual (DINAPI), Republica del Paraguay
▪ Executing Agency	Inter-American Development Bank (IDB)
▪ Donors providing funding	Public Capacity Building Korea Fund for Economic Development (KPC), US\$ 780,000
▪ IDB Funding Requested:	US\$ 780,000
▪ Local counterpart funding, if any:	N/A
▪ Disbursement period:	24 months (18 months for execution)
▪ Required start date:	10/19/2018
▪ Types of consultants:	Firm and Individual consultant
▪ Prepared by Unit:	IFD/CTI
▪ Unit of Disbursement Responsibility:	CTI/CPR
▪ Included in Country Strategy (y/n);	No
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Productivity and Innovation Strengthening of state institutional capacity

II. Objective and Justification of the TC

- 2.1 Paraguay handles the administrative procedure of intellectual property application and registration manually to process the paper documents which poses delays and potential errors. The general objective of the project is to upgrade the Intellectual Property Rights (IPR) system in Paraguay by supporting the National Directorate of Intellectual Property (DINAPI) to bring forth the initiative of e-government to enhancing

public sector efficiency, effectiveness and accuracy of administrative procedures through automatization and providing greater accessibility through digitizing its services online.

- 2.2 Through the National Development Plan 2014-2030 (PND, Plan Nacional de Desarrollo 2014-2030), the Government of Paraguay aims to accelerate competitive, sustainable and knowledge-based economic development. Three strategies of the plan are poverty reduction and social development, inclusive economic growth and insertion of Paraguay in the world. To transition from natural resources-based economy to a knowledge-based one, Paraguay aims to pursue progressive development of the national innovation system. Development of open and transparent government (including e-government solutions) and increasing the number of industrial patents is some of the key strategies for pursuing inclusive economic growth based on competitiveness and innovation.
- 2.3 According to the International Property Rights Index in 2017, Paraguay ranks in the 100th place out of the 127 countries. Three pillars of the index include legal and political environment, physical property rights, and intellectual property rights. In comparison to the global and regional standards, areas of weakness for Paraguay includes judicial independence, control of corruption, protection of physical property, and protection of intellectual property rights as the Paraguayan IP system is exposed to high level of piracy and counterfeiting and serious delays in granting patents. In 2015, Paraguay has had a total of 339 patent applications; 323 from the non-residents and 16 from residents. In the same year, 10 patents were granted.
- 2.4 DINAPI is the national institution in charge of the administration of patents, utility models, trademarks, denominations of origin, geographical indications and industrial design in the country¹. It has developed the National Plan of Intellectual Property 2030 (Plan Nacional de Propiedad Intelectual 2030) to strengthen the institutional capabilities and to contribute to the transition towards knowledge-based, diversified and competitive national economy. Currently, DINAPI utilizes outdated procedures and systems to fulfill its role, without taking advantage of the recent changes brought by the new digital technologies and automation. In addition, delays are worsened by limited human resources and inefficient paper-based manual administrative processes. Paper-based applications and examinations are stored in limited and inadequate physical spaces. There are no e-government services provided.
- 2.5 Automation and digitization are a key step to provide quality services to innovators and other users; including e-government solutions and is necessary to enhance the use of intellectual property systems as a development tool. The general objective of the project is to upgrade the intellectual property (IP) rights system in Paraguay by supporting the DINAPI. Specific Objectives of the project are: (i) to replace the paper-based archives and processes of DINAPI with a paperless and digital based solutions; (ii) to implement e-government solutions as part of the IP management system of DINAPI; (iii) to build DINAPI's internal capacity in the use of the new systems and disseminate information about e-government solutions offered by DINAPI to users and other stakeholders; (iv) to supply information communications and technology(ICT)

¹ DINAPI was established as public law entity with legal personality and autarkic character and its own patrimony, as an organ of Implementation of the National intellectual property policy. Law No. 4798/2012.

equipment necessary for the implementation of IP document digitization system and paperless IP system².

- 2.6 This technical cooperation is consistent with the Update to the Institutional Strategy 2016-2019 (AB-3008) as it will contribute to strengthening productivity and innovation as well as institutional capacity and rule of law. It will contribute to Corporate Results Framework 2016-2019 (GN-2727-6) by improving government effectiveness and enhancing the government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery. The project will contribute to the enhancement of the priority sectors including the productive development and public management identified by the IDB Country Strategy on Paraguay (2014-2018) (GN-2769) to enhance the productivity and competitiveness of firms and to improve the effectiveness, transparency and integrity of public entities. This project is also in alignment with the Innovation, Science and Technology Sector Framework (GN-2791-8). It will contribute to create a good innovation climate by enhancing the intellectual property management capabilities. The TC corresponds to one of the sectors (e-government) contemplated in the agreement for the establishment of the KPC (Article 2.2.) dated as March 19th, 2021 ("KPC Agreement"). The donor provided its approval to this TC, as required under Article 2.5. of the KPC Agreement.

III. Description of activities / components and budget

- 3.1 **Component I. Implementing an IP document digitization system (US\$310,000).** The goal of this component is to implement an IP document digitization system which will generate electronic data. A digitized IP document system will provide the basis for implementing paperless IP administration of DINAPI's services and processes. Paper-based documents of IP applications and other procedural documents will be converted into electronic documents, from which a full-text document can be extracted and managed in database and file servers. It will be an independent but compatible system with DINAPI's existing IP administrative systems (CENTURA and IPAS), all of which will share relevant data. This system will be the foundation of an advanced IP search system for the agency and for Paraguayan citizens and companies, necessary for a more sustainable and knowledge-based economy. It will allow streamlining of the application management process increasing DINAPI's productivity. In addition, DINAPI will be able to provide effective and timely services to clients and users by reducing delays in examination of IP applications and enhancing accuracy in automated processes. A manual on the IP document digitization system will be provided to enable the DINAPI officials to sustainably produce high quality digitized documents and to ensure productivity. It will also supply ICT equipment necessary for the operation and management of IP document digitization system. Some of the outdated equipment will be replaced with state-of-the-art equipment for improved performance. The equipment may include Web/File/DB servers, hardware such as high-resolution scanners, and software such as OCR and back-up solution.
- 3.2 This component of the Technical Cooperation has been drawn from the Knowledge Sharing Program (KSP) of the Government of Korea, through a consulting project conducted in 2015 to support the establishment of the intellectual property system in

² In accordance with paragraph 2.2, section c) of document GN-2765-1 (Policy for the Selection and Contracting of Consulting Firms for Bank-executed Operational Work) such goods and related services are necessary to achieve the objectives of the Bank-executed Operational Work and are included in the consulting services contract and represent less than ten percent (10%) of the consulting services contract value.

Paraguay. That program established the collaboration between DINAPI and the Korea Institute of Patent Information (KIPI), which has high level of expertise and experience in IP automation and IP legislation. IP document digitization system will be implemented in collaboration with KIPI.

- 3.3 Component II. Implementing a paperless IP system and e-government solutions (US\$310,000).** A paperless IP system will process and store documents in electronic databases, thus removing the paper involved in the administration processes carried out by DINAPI as part of its mandate. Such system will provide browsing and searching services for all digitized IP documents including applications, attached documents, interim documents, and receipt of fees, all of which will be integrated in an e-government platform available to users and clients of services provided by DINAPI. Features of the system will include providing electronic approval services for each IP application lifecycle, such as confirmation of submitted applications, approval of formal examination and substantive examination results, registration of IP official's opinions and granting electronic signatures. This system will also handle all notifications and reports generated in the IP information system of DINAPI, which will be delivered to applicants/agents in Paraguay. This comprehensive system will operate in conjunction with the existing IP administrative system of DINAPI by digitizing the administrative system from the paper-based system into the web-based paperless one. All digitized documents, the outcome of Component 1, can be searched and viewed on the web. Reports and approval can be uploaded onto the system. The examiner can make approval or disapproval of the IP and provide comments electronically on the system. Ultimately, this system will enhance the efficiency in public administration and transparency in handling IP document in Paraguayan IP sector by removing all paper documents that were previously used in every IP administrative process and providing a platform for e-government services in the IP sector. Launching the new system will allow applicants or attorneys to electronically complete and submit the online applications with the attached documents. This means that the applicants or attorneys will no longer have to physically visit DINAPI. The online dispatching and browse function will allow bidirectional data communication between the patent examiners at DINAPI and the patent practitioners. It will significantly help improve the efficiency, accuracy, and reliability of the IPR administration and management as well as the user experience. The paperless IP system will be based on the existing legal and institutional framework. However, suggestions for enhancing the regulation of IP administration will be provided. A manual for the paperless IP system will be provided for the convenience of the users. Under this component, ICT equipment necessary for the operation and management of paperless IP system will be available. Some of the outdated equipment will be replaced with state-of-the-art equipment for improved performance. The equipment may include Web/File/DB servers, hardware such as high-resolution scanners, and software such as OCR and back-up solution. This component of the Technical Cooperation will also be carried out in collaboration with KIPI as it will take the digitized document system as its foundation.
- 3.4 Component III. Capacity building and dissemination (US\$120,000).** This component will be comprised of the following activities: (i) local training workshops to provide in-house training for DINAPI officials to manage digitization and paperless IP system as well as the IT system to equip with knowledge on operation and maintenance of the IT infrastructure and system; (ii) pilot digitization of 1,000 IP documents; (iii) open dissemination seminars to raise public awareness and build capacities on the new IP system by training external users. This component is closely related to the previous two components as it will train the internal officials of the

DINAPI on the use of the new systems, hence, will be carried out in collaboration with KIPI.

Internal training workshops: The local training workshops will be held to provide in-house training for DINAPI officials. First workshop will be for the managers and administrators of the IT system on paperless administration of IP applications, and for those that manage the IT system. Second workshop will be for all DINAPI officials. The program of the workshop will be developed in discussion with DINAPI based on the internal demand and priority. The topics of the training will include use of the newly installed system, IP e-government strategy, digitization of IP administration system, IP examination, among others. The presentation materials will be used as basic training materials for the future.

Pilot digitization of 1,000 IP documents: Expert(s) will be dispatched to provide practical user training to DINAPI officials that are responsible for digitization and examiners by supporting digitization of the stock of 1,000 patent documents (registered and pending). The expert will provide on-site assistance to digitize the 1,000 documents currently stored in the archive room. After being transferred to a digital format, the documents will be made accessible in the paperless system. Through this pilot program, the know-hows and knowledge to operate the digitization system will be shared with the DINAPI officials that will gain experience from hands-on training and learning-by-doing. The pilot digitization will also provide the opportunity to test the system.

Two open dissemination seminars: Open dissemination seminars will be co-organized by KIPI and DINAPI to raise public awareness on the IP, build capacities of the new IP automation system and to train the external users. The target audience of the seminars will include the SMEs, research institutes, universities and patent attorneys to disseminate knowledge and capacity related to IP. Seminars will be held in Asuncion and Ciudad del Este. The seminar program and training materials will be developed for DINAPI to repeat the dissemination seminar and user training in the future whenever deemed necessary.

Local and international consultants, who are knowledgeable of the IP system in Paraguay and in Korea, will be hired to support the implementation of the project in the field. These consultants will contribute to the smooth work flow and discussion between DINAPI, KIPI and the IDB throughout the project period to conduct different tasks needed for the successful implementation of the project.

Indicative Budget

Activity/ Component	Description	IDB/Fund Funding	Counterpart Funding	Total Funding
Component I	Implementing IP document digitization system.	310,000	0	310,000
Component II	Implementing paperless IP system	310,000	0	310,000
Component III	Capacity Building Program and dissemination	120,000	0	120,000
	Operation, Monitoring and Evaluation	40,000	0	40,000
Total		780,000	0	780,000

IV. Executing agency and execution structure

- 4.1 This project will be executed by the Competitiveness, Technology and Innovation (CTI) Division of the Institutions for Development (IFD) at the request of the Government of Paraguay. This is based on its capacity to implement technical cooperation projects and its knowledge and experience among different countries in the region. The beneficiary of this TC, DINAPI will actively contribute to the discussion of the terms of reference, assist the firm to carry out the consultancy, and to review the final outcomes of the TC. DINAPI's collaboration will not constraint the Bank's ability to manage the relationship with any consultants hired under this TC. Bank's execution is in compliance with the Bank's Technical Cooperation Policy (GN-2470-2), which requires, in case of Bank-executed TCs, that the beneficiary country or group of countries concurs.
- 4.2 The Bank through CTI specialists will supervise the technical and operational activities related to the project. The Bank will be the executing unit of the project and the beneficiary will submit a quarterly technical report with information about activities, products, results, and lessons learned.
- 4.3 The activities to be executed are included in the Acquisition Plan (Annex IV) and will be contracted in accordance with Bank policies as follows: (a) AM-650 for Individual consultants; (b) GN-2765-1 and Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature and; (c) GN-2303-20 for logistics and other related services.
- 4.4 The consulting services of KIPI will be contracted using the non-competitive method of single-source selection contemplate in GN-2765-1, which is justified taking into account the following: it is a task that represents a natural continuation of the previous work carried out by KIPI with DINAPI. The Government of Paraguay has specifically demanded that the KIPI conduct this TC in the letter of request to the IDB to install the IP digitalization system and to implement the IP paperless IP system. In addition, only KIPI is qualified or has the experience of exceptional worth for this assignment and it presents a clear advantage over competition. KIPI specializes in the IP information and administration supporting both the usage and service of IP information. Since its

establishment in 1995, KIPi has carried out the design, establishment and management of the digitized IP administration system. Annually, it carries out over 300,000 digitization of documents needed for IP application with confidentiality, timeliness and security. KIPi also has relevant experience in collaborating with Intellectual Property Offices in developing countries to provide consultation of the IP information administration system to advance the existing systems, automatize the administration and improve the IP management system. To illustrate, in 2015, KIPi conducted the Knowledge Sharing Program (KSP) with the DINAPI in Paraguay to strengthen the IP administration system, through which it analyzed the status and assessed the IP information system in Paraguay and has selected priorities based on the user's requests and importance. Based on this work, KIPi is already well-knowledgeable of the IP information system of Paraguay and has built strong partnership with DINAPI. It is the only institution that has conducted such analysis and assessment of DINAPI's institutional capacity.

- 4.5 The selection and hiring processes, as well as the products of the different consultancies, will be coordinated with the beneficiary. Following approval of this TC, the Bank will conduct a full day opening session with DINAPI to agree on and document the implementation and coordination procedures that the Bank will follow to ensure timely feedback and cooperation from DINAPI throughout the execution period.
- 4.6 Given the specific design of the products contemplated in this TC and their tailored design and subsequent use only by DINAPI, the Bank will not be the owner of any such products. Therefore, the agreements to be signed between the Bank and the consultants hired under this TC shall specify that the Bank and the respective consultant or consulting firm will transfer ownership of the products to DINAPI.

V. Major Issues

- 5.1 The international consulting firm's expertise of IP automation as well as understanding of the challenges of the Paraguay's IP system is crucial. The success of the project, especially for Component II and III, will depend on the close collaboration of the consulting firm and DINAPI to build capacity for IP management and to enhance administrative efficiency. To mitigate such risk, the measures mentioned in Paragraph 4.5 in the above will be implemented. Upon consultation with DINAPI, for application and adaptation of the proposed technologies in this TC, no specific regulation has been found necessary for DINAPI in Paraguay. A potential issue that is associated with the project is the user adoptability and easiness of use of the automatized IP system by the users, the applicants. To mitigate this risk, capacity building program will be conducted for officials in DINAPI to train the use and operation of the newly established system. In addition, dissemination seminar and workshop will be held to raise public awareness of the newly established IP administration system that targets the IP applicants.

VI. Exceptions to Bank policy

- 6.1 This project does not foresee any exceptions to Bank policy.

VII. Environmental and Social Strategy

- 7.1 Given the nature of the program, there are no associated environmental or social risks. Based on the Environment and Safeguards Compliance Policy (OP-703) this operation is classified as “C” (See [Safeguards Policy Filter Report](#) and the [Screening Form](#)).

Annexes required:

- Annex I: [Request Letter](#)
- Annex II: [Results Matrix](#)
- Annex III: [Terms of Reference](#)
- Annex IV: [Procurement Plan](#)

**ENHANCING INTELLECTUAL PROPERTY (IP) MANAGEMENT IN PARAGUAY: IP DIGITIZATION AND
IMPLEMENTATION OF PAPERLESS SYSTEM**

PR-T1260

CERTIFICATION

I hereby certify that this operation was approved for financing under the **Public Capacity Building Korea Fund for Economic Development (KPC)** through a communication dated July 19, 2018 and signed by Byoung Kim (ORP/GCM). Also, I certify that resources from said fund are available for up to **US\$780,000** in order to finance the activities described and budgeted in this document. This certification reserves resource for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, representing a risk that will not be absorbed by the Fund.

Certified by:	_____ Original Signed Sonia M. Rivera Chief Grants and Co-Financing Management Unit ORP/GCM	_____ 10/12/2018 Date
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Approved by:	_____ Original Signed Ana Rodriguez-Ortiz Manager Institutions for Development Sector IFD/IFD	_____ 10/15/2018
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