TC ABSTRACT

I. Basic Project Data

▪ Country/Region:	COSTA RICA/CID - Isthmus & DR
▪ TC Name:	Scaling up the current SINPE-TP into an interoperable payment system for the San José Greater Metropolitan Public Transport
▪ TC Number:	CR-T1255
▪ Team Leader/Members:	GRANADA GARCES, ISABEL CRISTINA (INE/TSP) Team Leader; BAYONA PULIDO, MAURICIO (INE/TSP) Alternate Team Leader; RUIZ MORA, DAVID JOSE (CID/CCR); LEE, SEONHWA (INE/TSP); BARRAGAN CRESPO, ENRIQUE IGNACIO (LEG/SGO); SARACENO, PIER PAOLO (INE/TSP); MIX VIDAL, RICHARD ALEXANDER (INE/TSP); SEUNGYEON KIM (INE/TSP); KIM, DAEHYUN (INE/TSP)
▪ Taxonomy:	Operational Support
▪ Number and name of operation supported by the TC:	Road Infrastructure Program and promotion of Public-Private Partnerships (PPP) - CR-L1139
▪ Date of TC Abstract:	17 Dec 2021
▪ Beneficiary:	Costa Rica through the Ministry of Public Works and Transport
▪ Executing Agency:	INTER-AMERICAN DEVELOPMENT BANK
▪ IDB funding requested:	US$400,000.00
▪ Local counterpart funding:	US$0.00
▪ Disbursement period:	36 months
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	INE/TSP - Transport
▪ Unit of Disbursement Responsibility:	INE/TSP - Transport
▪ TC included in Country Strategy (y/n): ▪ TC included in CPD (y/n):	No No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality ; Productivity and innovation ; Environmental sustainability; Gender equality

II. Objective and Justification

2.1 This TC aims to support the Ministry of Public Works and Transport (MOPT) in expanding the current Electronic Payment System in its urban train network (SINPE-TP) towards an interoperable system for both trains and buses operating in the Grand Metropolitan Area (GMA) of San José.

2.2 By scaling up the SINPE-TP into an interoperable electric payment system, the TC will contribute directly to the improvement of the efficiency of the Public Transport (PT) in the metropolitan area, enhancing the user experience and fostering its attractiveness for the San José citizens, as well as putting a steppingstone for the possible future deployment of an integrated Mobility as a Service transport system, which will position Costa Rica as one of the regional frontrunners in providing an efficient and accessible public transport service.

2.3 Currently, the GMA of San José counts every day with the displacement of about 1.5 million people, who from the periphery of the urban area move towards the city center of San José. Of those travels, PT covers only 22%, while most of the population

is still counting on their individual vehicle as the main mean of transportation. This situation contributes to significant and focalized high levels of congestion.

2.4 The current public transportation system was not originally conceived to allow combination of routes and transport modalities. Such structure is limiting substantially the user experiences and, in turns, reduces the intermodal potential and the capacity of the PT to function as a competitive, and comfortable alternative to private individual transport. The lack of widespread availability of an electronic payment system is reducing the ability of transport operators to correctly design and plan an efficient transportation system, resulting in a significant cost for the country, as well as in a compelling lack of data, which does not allow an effective improvement of the service offered.

2.5 In September 2021, Costa Rica has adopted an Electronic Payment System in its urban train system (SINPE-TP). SINPE-TP is the first electronic payment system in the Region based on two means of payment: those that meet EMV specifications (Europay-Mastercard-Visa) and have proximity payment technology (contactless), as well as mobile phones with a QR code app. Nevertheless, the country's current PT remains still too distant from a digitalized, integrated, and interoperable system. The payment system is still primarily based on cash and no ticket is issued for a trip from one point to another of the metropolitan area. The SINPE-TP has been piloted only in few rail sections (e.g., Alajuela/San José) and will be soon expanded in other train lines.

2.6 The implementation of an interoperable SINPE-TP is expected to provide very accurate database patterns in real and serve to the reorganization of the public transport system, by allowing an intelligent relocation of stops, the interconnection of bus lines and the urban train network and the issuance of special tickets to encourage the use of public transport.

2.7 Therefore, guaranteeing the mobility of public transport users with a single mean of digital payment become the primary objective for the development of a Costa Rican interoperable efficient public transport. As a benchmark case, South Korea has already made an excellent expertise in implementing and managing the efficient public transport system and establishing integrated digital public transport payment system including the metro, urban trains, BRTs, and urban buses. Such a wide experience is therefore expected to provide technical and institutional support for the digital transformation and the interoperable public transport system in the GMA of San José, Costa Rica.

2.8 The implementation of a new interoperable system is in line with the main priorities of the IDB Vision 2025: (i) by embracing the digital transformation of the sector (ii) contributing to the mitigation of the transport's CO2 emissions, thanks to the fostering of public transport usage and, in turns, reducing externalities like congestion (iii) promoting the minimization of tax evasion, particularly important for the SMEs growth and its access to external credit (iv) encourage the mobility of women, by proposing an efficient alternative to individual vehicle uses.

III. Description of Activities and Outputs

3.1 **Component I: Component 1: Feasibility Study on the Bus/Train Interoperable Electronic Payment System.** This component will be constructed around three activities: (i) Diagnostic Study identifying opportunities and challenges of an interoperable SINPE-TP system; (ii) Creation of an updated structure of the SINPE-TP system for the interoperable electronic payment; (iii) Establishment of a roadmap/masterplan for the possible future implementation of a MaaS system in GMA San José

3.2 **Component II: Component 2. Piloting of the new interoperable payment system in a real-life environment.** This component will cover the costs of the testing and experimentation in real life environment of the new interoperable payment system in one interconnected route (train and bus) – for a full cycle process (user payment, collection, revenues distribution). The pilot will allow the identification of possible bottlenecks/bugs of the system and will feed its further improvements.

3.3 **Component III: Component 3: Capacity Building and Knowledge Disseminations.** This activity will cover the organization of capacity building workshops for Costa Rican government officials in Korea, so to share Korea's acquired knowledge regarding the implementation of interoperable transport system. It will also cover all the costs related to the dissemination and communication activities of the project (possible publications, translations, events organizations, etc.).

IV. Budget

Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Component 1: Feasibility Study on the Bus/Train Interoperable Electronic Payment System	US$220,000.00	US$0.00	US$220,000.00
Component 2. Piloting of the new interoperable payment system in a real-life environment	US$100,000.00	US$0.00	US$100,000.00
Component 3: Capacity Building and Knowledge Disseminations	US$80,000.00	US$0.00	US$80,000.00
Total	**US$400,000.00**	**US$0.00**	**US$400,000.00**

V. Executing Agency and Execution Structure

5.1 As per request of the counterpart this TC will be bank executed to guarantee strong coordination between components and monitoring to pilots' execution. The IDB's activities will be the responsibility of the Transportation Division (INE / TSP). The main responsibilities of the IDB will be: (i) to develop the work plan and monitor the schedule of activities; (ii) carry out the financial administration of the project; (iii) coordinate the preparation of the Terms of Reference (ToR) for the contracting, selection, and contracting of consulting services required by IDB standards, policies, and procedures; (iv) prepare / review reports on the progress of the project; and (v) prepare and update the procurement plan.

5.2 In alignment with the document Procedures for the Processing of Technical Cooperation and Related Matters (OP-619-4), this request is justified by the IDB's experience in the preparation and development of the operational and technical instruments proposed for this type of operations. by the knowledge of the work environment and with the last one to improve the independence in the process of execution of the TC.

VI. Project Risks and Issues

6.1 The coordination with the main stakeholders (government, train and bus operators, team projects and greater metropolitan areas local authorities) is one of the main challenges of this project, as all of them must be on board of the pilot. In addition, it will be crucial to the project the right timing to perform training activities and include these populations as employees to the IDB funded projects.

VII. Environmental and Social Classification

7.1 The ESG classification for this operation is "N/A".