

CONSULTANCY FOR THE ELABORATION OF A DIAGNOSTIC STUDY AIMING AT IDENTIFYING OPPORTUNITIES AND CHALLENGES OF AN INTEROPERABLE SINPE-TP SYSTEM IN SAN JOSÉ GREAT METROPOLITAN AREA.

(CR-T1255)

TERMS OF REFERENCES

1. Context and Justification

- 1.1. Costa Rica has set the goal of modernizing its public transport system. In September 2021, the country adopted an Electronic Payment System in its urban train system (SINPE-TP). The new SINPE-TP is structured around a central collection system that receives the information of the payment transactions carried out in the transport services, performs the calculation of rates, processes the payments, and distributes the revenues.
- 1.2. The SINPE-TP is based on a solid and innovative partnership between the Central Bank, the Public Services Agency, the Costa Rican Railway Institute (INCOFER), and the MOPT. Thanks to this innovative in-house partnership, the system is characterized by technological sovereignty, meaning that it does not depend on specific external providers for its operations. On the contrary, the public entity involved (i.e. Central Bank) is the main responsible of managing their operation and, when required, implementing new possible functionalities. SINPE-TP is the first electronic payment system in the Region based on two means of payment: (i) those that meet EMV specifications (Europay-Mastercard-Visa) and have proximity payment technology (contactless); and (ii) mobile phones with a QR code app.
- 1.3. Nevertheless, the country's current public transport remains still too distant from a digitalized, integrated and interoperable system. Despite the significant and recent progress undertaken, its development is still in an early stage. The SINPE-TP has indeed been designed as a system to be implemented gradually. At the moment, it has been piloted only in few rail sections (e.g. Alajuela/San José) and will be soon expanded in other train lines, to cover the GMA of San José. With the support of IDB, the MOPT together with the Costa Rica Central Bank is currently also testing the possibility to extend the system to buses providers operating in the metropolitan area. However, the public transport payment system is still primarily based on cash, where users are paying cash on each mean of transport used and no ticket is issued for a trip from one point to another of the GMA. The lack of widespread availability of an electronic payment system is reducing the capacity of transport operators to correctly design and plan an efficient transportation system, resulting in significant costs for the country, also due to the high circulation of coins. This situation also causes a restrictive lack of data, like information on the number of passengers on each route, travel intentions and frequency of use, among other useful



resources, that doesn't allow an effective reorganization of the stops and the trunk routes based on the actual demand, or an improvement of the service offered.

- **1.4.** In this context, the Inter-American Development Bank (through the support of Public Capacity Building Korea Fund for Economic Development) is looking for the provision of consulting services that aims to support the Ministry of Public Works and Transport (MOPT) of Costa Rica in expanding the current Electronic Payment System (SINPE-TP) towards an interoperable system for both trains and buses operating in the Grand Metropolitan Area (GMA) of San José.
- 1.5. 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 (MaaS) transport system, which will position Costa Rica as one of the regional frontrunners in providing an efficient and accessible public transport service.

2. Objectives:

This consultancy has as main objective the elaboration of a diagnostic and feasibility study for the deployment of the interoperable electronic payment system for bus and train providers in the GMA of San José.

3. Main Activities

- **3.1.** Identify the institutional challenges and possible operational bottlenecks and its related costs: As part of the main feasibility study, the consulting firm will need to identify all the possible operation and institutional challenges, related to the change from an ordinary administrative, operating, and financial scheme, towards an interoperable model based on a system that works for different typology of services and subsectors. It will include desk research and interviews with key stakeholders involved in the process. A benchmarking of innovative and successful practices of an interoperable digital payment system will be carry out, including case from inside and outside the Latin American & Caribbean region.
- **3.2.** Mapping of the relevant stakeholders to be included in a future interoperable payment: The consulting firm will need to undertake a detailed and rigorous mapping of the stakeholders (public, private, financial institutions etc..) to be involved in the development process of an interoperable system, its involvement stage as well as the specific role to be covered.
- **3.3.** Propose an actual workplan for the implementation of the system: The consulting firm will deliver a concrete action plan leading to the implementation of an interoperable digital payment system for Costa Rica, taking into consideration (i) the status quo of the already adopted pilot SINPE-TP for the train and the (most recent) bus system (ii) the medium-long term purpose of establishing a Mobility as a Service (MaaS) for the GMA of San José.



4. Expected Products

To meet the objectives of this consultancy, the consulting firm must submit the following reports:

- **Deliverable 1**. Work plan and methodology, including the schedule with the description of the team members and their respective estimate of time.
- **Deliverable 2**. Report 1 will be associated with the deliverable with a first advance of the study, including activities 1,2,3
- **Deliverable 3**. Report 2 will be associated with the delivery of a second preview of the study, including activities 1,2,3
- **Deliverable 4**. Report 3 will be associated with the final delivery of the feasibility study.

All products must be delivered to the Bank in an electronic file: Microsoft Word reports, Microsoft Excel spreadsheets, high-resolution PDF or JPG files and/or Microsoft Power Point presentations. Zip files will not be accepted as final reports due to Archives Management Section regulations. The reports will be presented in Spanish.

5. Payment timeline

Payment terms will be based on project milestones or deliverables. The Bank wishes to receive the most competitive cost proposal for the services described in this document. The Official Exchange Rate of the IDB indicated in the RFP will be applied for the necessary conversions of payments in local currency.

- I. First payment equivalent to **10%** of the total amount of the consultancy against presentation and approval of deliverable 1.
- II. Second payment equivalent to **30%** of the total amount of the consultancy against presentation and approval of deliverable 2.
- III. Third payment equivalent to **30%** of the total amount of the consultancy against presentation and approval of the deliverable 3.
- IV. Fourth payment equivalent to **30%** of the total amount of the consultancy against presentation and approval of the deliverable 4.

6. Selection Criteria

- **6.1.** A consulting firm with at least 7 years' experience in designing intelligent transport system, electronic payment for public transport and interoperable urban transport system.
- **6.2.** Experience criteria of the consulting firm: Proposing companies must present at least 3 recent references in the development of the transport sector and electronic payment systems.
- 6.3. Qualifications of the work team. The consulting team should be made up of three specialists with



proven experience in intelligent transportation solutions, payment collection system and interoperable urban transport system. Preferably with a previous experience in working for the development of MaaS system at an international level.

7. Summary of the opportunity:

- **7.1.** Type of contract and modality: contract for external products and services, lump sum.
- **7.2.** Duration of the contract: **60 days of effective work**, not necessarily consecutive, counted in a period of **12 months**.
- **7.3.** Start date: to be defined.
- **7.4.** Location: external consultancy.
- 7.5. Responsible person: Isabel Granada (igranada@iadb.org).
- **7.6.** Requirements: You must be a citizen of one of the 48 member countries of the IDB and have no relatives currently working in the IDB Group.

<u>Our culture:</u> Our people are committed and passionate about improving lives in Latin-America and the Caribbean, and they get to do what they love in a diverse, collaborative and stimulating work environment. We are the first Latin American and Caribbean development institution to be awarded the EDGE certification, recognizing our strong commitment to gender equality. As an employee you can be part of internal resource groups that connect our diverse community around common interests.

Because we are committed to providing equal opportunities in employment, we embrace all diversity and encourage women, LGBTQ+, persons with disabilities, afro-descendants, and indigenous people to apply.

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CONSULTANCY FOR THE CREATION OF AN UPDATED STRUCTURE OF THE SINPE-TP SYSTEM FOR THE INTEROPERABLE ELECTRONIC PAYMENT.

(CR-T1255)

TERMS OF REFERENCES

1. Context and Justification

- 1.1. Costa Rica has set the goal of modernizing its public transport system. In September 2021, the country adopted an Electronic Payment System in its urban train system (SINPE-TP). The new SINPE-TP is structured around a central collection system that receives the information of the payment transactions carried out in the transport services, performs the calculation of rates, processes the payments, and distributes the revenues.
- 1.2. The SINPE-TP is based on a solid and innovative partnership between the Central Bank, the Public Services Agency, the Costa Rican Railway Institute (INCOFER), and the MOPT. Thanks to this innovative in-house partnership, the system is characterized by technological sovereignty, meaning that it does not depend on specific external providers for its operations. On the contrary, the public entity involved (i.e. Central Bank) is the main responsible of managing their operation and, when required, implementing new possible functionalities. SINPE-TP is the first electronic payment system in the Region based on two means of payment: (i) those that meet EMV specifications (Europay-Mastercard-Visa) and have proximity payment technology (contactless); and (ii) mobile phones with a QR code app.
- 1.3. Nevertheless, the country's current public transport remains still too distant from a digitalized, integrated and interoperable system. Despite the significant and recent progress undertaken, its development is still in an early stage. The SINPE-TP has indeed been designed as a system to be implemented gradually. At the moment, it has been piloted only in few rail sections (e.g. Alajuela/San José) and will be soon expanded in other train lines, to cover the GMA of San José. With the support of IDB, the MOPT together with the Costa Rica Central Bank is currently also testing the possibility to extend the system to buses providers operating in the metropolitan area. However, the public transport payment system is still primarily based on cash, where users are paying cash on each mean of transport used and no ticket is issued for a trip from one point to another of the GMA. The lack of widespread availability of an electronic payment system is reducing the capacity of transport operators to correctly design and plan an efficient transportation system, resulting in significant costs for the country, also due to the high circulation of coins. This situation also causes a restrictive lack of data, like information on the number of passengers on each route, travel intentions and frequency of use, among other useful resources, that doesn't allow an effective reorganization of the stops and the trunk routes based



on the actual demand, or an improvement of the service offered.

- **1.4.** In this context, the Inter-American Development Bank (through the support of Public Capacity Building Korea Fund for Economic Development) is looking for the provision of consulting services that aims to support the Ministry of Public Works and Transport (MOPT) of Costa Rica in expanding the current Electronic Payment System (SINPE-TP) towards an interoperable system for both trains and buses operating in the Grand Metropolitan Area (GMA) of San José.
- 1.5. 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 (MaaS) transport system, which will position Costa Rica as one of the regional frontrunners in providing an efficient and accessible public transport service.

2. Objectives:

This consultancy has as main objective the creation of an updated structure of the SINPE-TP system for the interoperable electronic payment.

3. Main Activities

- **3.1.** The definition of the governance and decision-making structure of the new interoperable system: The consultancy firm will identify and propose the definition of the governance system linked to the interoperable payment system and the adaptation of the roles and responsibilities of the existing SINPE-TP amongst all stakeholders involved belonging to different subsectors, as well as the risks they may assume.
- **3.2.** Adapt the current Central Collection System and the list management system: Ensure the adaptation of the current systems developed for the train and bus systems, for the realization of an interoperable payment scheme. It will include adapting the technology, operational models, and financial schemes.
- 3.3. The design of the commercial income distribution scheme amongst transport providers: The consultancy firm should design the necessary incentives to achieve a competitive environment in a cooperative environment focused on the user, as well as the definition of the commissions for the technical interoperability of the system so to guarantee the coordination between operators.
- 3.4. The creation of data and payment security systems: The firm will develop system of security, digital sovereignty, data ownership and compatibility between systems and the infrastructure available, contemplating the various perspectives of the different stakeholders involved in an articulated manner and considers the realities of the context in which public transport operates in Costa Rica.



4. Expected Products

To meet the objectives of this consultancy, the consulting firm must submit the following reports:

- **Deliverable 1**. Work plan and methodology, including the schedule with the description of the team members and their respective estimate of time.
- **Deliverable 2**. Report 1 will be associated with the submission of a deliverable referring to the activities 1
- **Deliverable 3**. Report 2 will be associated with the submission of the deliverable referring to the including activities 2,3
- **Deliverable 4**. Report 3 will be associated with the submission of the deliverable referring to the activity 4

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5. Payment timeline

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- III. Third payment equivalent to **40%** of the total amount of the consultancy against presentation and approval of the deliverable 3.
- IV. Fourth payment equivalent to **30%** of the total amount of the consultancy against presentation and approval of the deliverable 4.

6. Selection Criteria

- **6.1.** A consulting firm with at least 7 years' experience in designing intelligent transport system, electronic payment for public transport and interoperable urban transport system.
- **6.2.** Experience criteria of the consulting firm: Proposing companies must present at least 3 recent references in the development of the transport sector and electronic payment systems.
- **6.3.** Qualifications of the work team. The consulting team should be made up of three specialists with proven experience in intelligent transportation solutions, payment collection system and



interoperable urban transport system. Preferably with a previous experience in working for the development of MaaS system at an international level.

7. Summary of the opportunity:

- 7.1. Type of contract and modality: contract for external products and services, lump sum.
- **7.2.** Duration of the contract: **90 days of effective work**, not necessarily consecutive, counted in a period of **12 months**.
- **7.3.** Start date: to be defined.
- **7.4.** Location: external consultancy.
- **7.5.** Responsible person: Isabel Granada (<u>igranada@iadb.org</u>).
- **7.6.** Requirements: You must be a citizen of one of the 48 member countries of the IDB and have no relatives currently working in the IDB Group.

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CONSULTANCY FOR THE ESTABLISHMENT OF A ROADMAP/MASTERPLAN FOR THE POSSIBLE FUTURE IMPLEMENTATION OF A MAAS SYSTEM IN GMA SAN JOSÉ

(CR-T1255)

TERMS OF REFERENCES

1. Context and Justification

- 1.1. Costa Rica has set the goal of modernizing its public transport system. In September 2021, the country adopted an Electronic Payment System in its urban train system (SINPE-TP). The new SINPE-TP is structured around a central collection system that receives the information of the payment transactions carried out in the transport services, performs the calculation of rates, processes the payments, and distributes the revenues.
- 1.2. The SINPE-TP is based on a solid and innovative partnership between the Central Bank, the Public Services Agency, the Costa Rican Railway Institute (INCOFER), and the MOPT. Thanks to this innovative in-house partnership, the system is characterized by technological sovereignty, meaning that it does not depend on specific external providers for its operations. On the contrary, the public entity involved (i.e. Central Bank) is the main responsible of managing their operation and, when required, implementing new possible functionalities. SINPE-TP is the first electronic payment system in the Region based on two means of payment: (i) those that meet EMV specifications (Europay-Mastercard-Visa) and have proximity payment technology (contactless); and (ii) mobile phones with a QR code app.
- 1.3. Nevertheless, the country's current public transport remains still too distant from a digitalized, integrated and interoperable system. Despite the significant and recent progress undertaken, its development is still in an early stage. The SINPE-TP has indeed been designed as a system to be implemented gradually. At the moment, it has been piloted only in few rail sections (e.g. Alajuela/San José) and will be soon expanded in other train lines, to cover the GMA of San José. With the support of IDB, the MOPT together with the Costa Rica Central Bank is currently also testing the possibility to extend the system to buses providers operating in the metropolitan area. However, the public transport payment system is still primarily based on cash, where users are paying cash on each mean of transport used and no ticket is issued for a trip from one point to another of the GMA. The lack of widespread availability of an electronic payment system is reducing the capacity of transport operators to correctly design and plan an efficient transportation system, resulting in significant costs for the country, also due to the high circulation of coins. This situation also causes a restrictive lack of data, like information on the number of passengers on each route, travel intentions and frequency of use, among other useful



resources, that doesn't allow an effective reorganization of the stops and the trunk routes based on the actual demand, or an improvement of the service offered.

- **1.4.** In this context, the Inter-American Development Bank (through the support of Public Capacity Building Korea Fund for Economic Development) is looking for the provision of consulting services that aims to support the Ministry of Public Works and Transport (MOPT) of Costa Rica in expanding the current Electronic Payment System (SINPE-TP) towards an interoperable system for both trains and buses operating in the Grand Metropolitan Area (GMA) of San José.
- 1.5. 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 (MaaS) transport system, which will position Costa Rica as one of the regional frontrunners in providing an efficient and accessible public transport service.

2. Objectives:

This consultancy has as main objective the establishment of a roadmap/masterplan for the possible future implementation of a MaaS system in GMA San José

Main Activities

- **2.1.** Provide a clear understanding of the benefits of a MaaS system for the GMA San José. The roadmap should include a clear explanation and identification of the benefits generated by the implementation of a MaaS system on the mobility sector in the GMA, considering (at least) its contribution in terms of decarbonization of the sector, management of the urban mobility demands, the impact on economic activity (in particular on urban SMEs), access for women and vulnerable population.
- 2.2. Identify an operational masterplan necessary to deploy a MaaS system for the GMA. The masterplan should identify a realistic masterplan covering all the dimension linked to the implementation of a MaaS system in the GMA of San José (e.g. operators' involvement, financial scheme, geographic limits, etc..).

3. Expected Products

To meet the objectives of this consultancy, the consulting firm must submit the following reports:

- **Deliverable 1**. Work plan and methodology, including the schedule with the description of the team members and their respective estimate of time.
- **Deliverable 2**. Report 1 will be associated with the deliverable with a first advance of the study, including activities 1,2,3



• Deliverable 3. Report 2 will be associated with the final delivery of the feasibility study.

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4. Payment timeline

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- II. Second payment equivalent to **30%** of the total amount of the consultancy against presentation and approval of deliverable 2.
- III. Third payment equivalent to **60%** of the total amount of the consultancy against presentation and approval of the deliverable 3.

5. <u>Selection Criteria</u>

- **5.1.** A consulting firm with at least 7 years' experience in designing intelligent transport system, electronic payment for public transport and interoperable urban transport system.
- **5.2.** Experience criteria of the consulting firm: Proposing companies must present at least 3 recent references in the development of the transport sector and electronic payment systems.
- **5.3.** Qualifications of the work team. The consulting team should be made up of three specialists with proven experience in intelligent transportation solutions, payment collection system and interoperable urban transport system. Preferably with a previous experience in working for the development of MaaS system at an international level.

6. Summary of the opportunity:

- **6.1.** Type of contract and modality: contract for external products and services, lump sum.
- **6.2.** Duration of the contract: **30 days of effective work**, not necessarily consecutive, counted in a period of **4 months**.
- **6.3.** Start date: to be defined.
- **6.4.** Location: external consultancy.
- **6.5.** Responsible person: Isabel Granada (igranada@iadb.org).
- 6.6. Requirements: You must be a citizen of one of the 48 member countries of the IDB and have no



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TESTING AND EXPERIMENTATION IN REAL LIFE ENVIRONMENT OF THE NEW INTEROPERABLE PAYMENT SYSTEM AMONGST ONE INTERCONNECTED ROUTE (TRAIN+BUS)

(CR-T1255)

TERMS OF REFERENCES

1. <u>Background and Justification</u>

- 1.1. Costa Rica has set the goal of modernizing its public transport system. In September 2021, the country adopted an Electronic Payment System in its urban train system (SINPE-TP). The new SINPE-TP is structured around a central collection system that receives the information of the payment transactions carried out in the transport services, performs the calculation of rates, processes the payments, and distributes the revenues.
- 1.2. The SINPE-TP is based on a solid and innovative partnership between the Central Bank, the Public Services Agency, the Costa Rican Railway Institute (INCOFER), and the MOPT. Thanks to this innovative in-house partnership, the system is characterized by technological sovereignty, meaning that it does not depend on specific external providers for its operations. On the contrary, the public entity involved (i.e. Central Bank) is the main responsible of managing their operation and, when required, implementing new possible functionalities. SINPE-TP is the first electronic payment system in the Region based on two means of payment: (i) those that meet EMV specifications (Europay-Mastercard-Visa) and have proximity payment technology (contactless); and (ii) mobile phones with a QR code app.
- 1.3. Nevertheless, the country's current public transport remains still too distant from a digitalized, integrated and interoperable system. Despite the significant and recent progress undertaken, its development is still in an early stage. The SINPE-TP has indeed been designed as a system to be implemented gradually. At the moment, it has been piloted only in few rail sections (e.g. Alajuela/San José) and will be soon expanded in other train lines, to cover the GMA of San José. With the support of IDB, the MOPT together with the Costa Rica Central Bank is currently also testing the possibility to extend the system to buses providers operating in the metropolitan area. However, the public transport payment system is still primarily based on cash, where users are paying cash on each mean of transport used and no ticket is issued for a trip from one point to another of the GMA. The lack of widespread availability of an electronic payment system is reducing the capacity of transport operators to correctly design and plan an efficient transportation system, resulting in significant costs for the country, also due to the high circulation of coins . This situation also causes a restrictive lack of data, like information on the number of passengers on each route, travel intentions and frequency of use, among other useful resources, that doesn't allow an effective reorganization of the stops and the trunk routes based on the actual demand, or an improvement of the service offered.



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2. Objectives:

This consultancy has as main objective the testing and experimentation in real life environment of
the new interoperable payment system amongst one interconnected route (train+bus), for a full
cycle process (user payment, collection, revenues distribution). The pilot will allow the
identification of possible bottlenecks and bugs of the system and will feed its further
improvements.

3. Main Activities

- 3.1. Develop the work plan for the fulfillment of the objectives, tasks and products of this consultancy: The consulting firm will deliver a concrete action plan leading to the implementation of the pilot project and related activities regarding this consultancy. It must take into consideration: (i) the status quo of the already adopted pilot SINPE-TP for the train and the (most recent) bus system (ii) the studies and plans already developed for the SINPE-TP with support from the IDB.
- 3.2. Prepare, execute and operate a practical experience ("pilot") in a real life environment of the new interoperable payment system considering both train and bus services: For the fulfillment of this main activity, the following sub-activities must be developed:
 - 3.2.1. Review previous studies developed for this project and validate the information to be handed by the IDB. This considers different aspects such as the possible operation and institutional challenges, the benchmarking of innovative and successful practices, the mapping of relevant stakeholders, among others.
 - 3.2.2.Identify the resource needs, both technological, financial and human, for the implementation and operation of the technology to be tested.
 - 3.2.3. Prepare and implementation, execution and evaluation plan for this pilot, considering, at least, a trial period of at least 1 month in a controlled environment and an official operation period of 3 months in a real life environment. This plan must mention de data that will be



generated throughout the experience, both operational and regarding the user's experience. This data will be useful for the evaluation stage of the project and will be accessible during the whole development of the pilot for monitoring and transparency matters.

- 3.2.4.Execute the pilot experience according to the approved version of the plan, in coordination with local authorities and the Bank's supervising team.
- 3.2.5. Prepare and execute training sessions for the relevant stakeholders to be part of the pilot experience.
- 3.2.6.Generate, store and share relevant data regarding the implementation and execution of the pilot experience with the related stakeholders.
- 3.2.7. Develop weekly reports to be shared with the local counterpart and the supervising team.
- 3.2.8.Develop and execute a survey to gather information and evaluate the user experience during the pilot.
- **3.3. Develop an evaluation report.** After the pilot operation phase is concluded, the consultancy firm will develop a document focused on the main takeaways and lessons learned from the experience. It must consider relevant suggestions for future similar experiences and for the expansion of this technological solution to the whole public transport system.

4. Expected Products

To meet the objectives of this consultancy, the consulting firm must submit the following reports:

- **Deliverable 1**. Work plan and methodology, including the schedule with the description of the team members and their respective estimate of time.
- **Deliverable 2**. Operational plan of the pilot experience.
- **Deliverable 3**. Implementation report, considering activities developed until the trial phase is completed.
- **Deliverable 4**. Operation report, considering activities developed until the official operation phase is completed.
- **Deliverable 5.** Final report regarding the evaluation and lessons learned from the project.

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5. Payment timeline

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- I. First payment equivalent to **10%** of the total amount of the consultancy against presentation and approval of deliverable 1.
- II. Second payment equivalent to **20%** of the total amount of the consultancy against presentation and approval of deliverable 2.
- III. Third payment equivalent to **20%** of the total amount of the consultancy against presentation and approval of the deliverable 3.
- IV. Fourth payment equivalent to **30%** of the total amount of the consultancy against presentation and approval of the deliverable 4.
- V. Fifth payment equivalent to **20%** of the total amount of the consultancy against presentation and approval of the deliverable 5 and the revised version of the previous deliverables.

Products	Timeframe1
Deliverable 1:	1 months
Deliverable 2:	2 months
Deliverable 3:	5 months
Deliverable 4:	9 months
Deliverable 5 and revised versions of previous deliverables.	12 months

6. Selection Criteria

- **6.1.** A consulting firm with at least 7 years' experience in implementing intelligent transport system, electronic payment for public transport and interoperable urban transport system.
- **6.2.** Experience criteria of the consulting firm: Proposing companies must present at least 3 recent references in the implementation of the transport sector and electronic payment systems solutions.
- **6.3.** Qualifications of the work team. The consulting team should consider at least two specialists with proven experience in intelligent transportation solutions, payment collection system and interoperable urban transport system. Preferably with a previous experience in working for the development of MaaS system at an international level.

7. Summary of the opportunity:

- **7.1.** Type of contract and modality: Consulting firm.
- **7.2.** Start date: to be defined.
- **7.3.** Location: Costa Rica.
- **7.4.** Responsible person: Isabel Granada (igranada@iadb.org).

Time counting since signature of the contract



CAPACITY BUILDING WORKSHOPS FOR COSTA RICAN PUBLIC OFFICIALS.

(CR-T1255)

TERMS OF REFERENCES

1. Background and Justification

- 1.1. Costa Rica has set the goal of modernizing its public transport system. In September 2021, the country adopted an Electronic Payment System in its urban train system (SINPE-TP). The new SINPE-TP is structured around a central collection system that receives the information of the payment transactions carried out in the transport services, performs the calculation of rates, processes the payments, and distributes the revenues.
- 1.2. The SINPE-TP is based on a solid and innovative partnership between the Central Bank, the Public Services Agency, the Costa Rican Railway Institute (INCOFER), and the MOPT. Thanks to this innovative in-house partnership, the system is characterized by technological sovereignty, meaning that it does not depend on specific external providers for its operations. On the contrary, the public entity involved (i.e. Central Bank) is the main responsible of managing their operation and, when required, implementing new possible functionalities. SINPE-TP is the first electronic payment system in the Region based on two means of payment: (i) those that meet EMV specifications (Europay-Mastercard-Visa) and have proximity payment technology (contactless); and (ii) mobile phones with a QR code app.
- 1.3. Nevertheless, the country's current public transport remains still too distant from a digitalized, integrated and interoperable system. Despite the significant and recent progress undertaken, its development is still in an early stage. The SINPE-TP has indeed been designed as a system to be implemented gradually. At the moment, it has been piloted only in few rail sections (e.g. Alajuela/San José) and will be soon expanded in other train lines, to cover the GMA of San José. With the support of IDB, the MOPT together with the Costa Rica Central Bank is currently also testing the possibility to extend the system to buses providers operating in the metropolitan area. However, the public transport payment system is still primarily based on cash, where users are paying cash on each mean of transport used and no ticket is issued for a trip from one point to another of the GMA. The lack of widespread availability of an electronic payment system is reducing the capacity of transport operators to correctly design and plan an efficient transportation system, resulting in significant costs for the country, also due to the high circulation of coins . This situation also causes a restrictive lack of data, like information on the number of passengers on each route, travel intentions and frequency of use, among other useful resources, that doesn't allow an effective reorganization of the stops and the trunk routes based on the actual demand, or an improvement of the service offered.



- 1.4. In this context, the Inter-American Development Bank (through the support of Public Capacity Building Korea Fund for Economic Development) is looking for the provision of consulting services that aims to support the Ministry of Public Works and Transport (MOPT) of Costa Rica in expanding the current Electronic Payment System (SINPE-TP) towards an interoperable system for both trains and buses operating in the Grand Metropolitan Area (GMA) of San José.
- 1.5. 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 (MaaS) transport system, which will position Costa Rica as one of the regional frontrunners in providing an efficient and accessible public transport service.

2. Objective

2.1. The general objective of this consultancy is the development of knowledge products and the organization of capacity building workshops for Costa Rican public officials, with a focus on pilot experiences and public policy recommendations developed in relation with the Electronic Payment System in its urban transportation system (SINPE-TP).

3. Activities and Responsibilities:

- 3.1. Organization of 2 sessions of capacity building workshops for Costa Rican government officials in Korea. These sessions will be aimed to share Korea's acquired knowledge regarding the implementation of interoperable transport system. One of the sessions will be held before the implementation of the related pilot experience, to support the preparation and implementation of the pilot project. The second one will be held after the pilot experience, to support the expansion process of the system. For each session, the consultant will be responsible of the following actions:
 - o Determining objectives of the event, planning committee and task assignments
 - o Establishing technical and budgetary needs
 - o Identifying and contacting the potential attendees
 - o Developing a chronogram and agendas for each session
 - o Developing the content for each session
 - o Coordinating the venue and spaces to be used
 - o Leading the communications of each event
 - o Coordinating interpretation and other relevant technical support
 - o Identify special side events
 - o Identify possible additional requirements
 - o Create session minutes
 - o Complete a report for each session



4. Expected products:

- 4.1. To meet the objectives of this consultancy, the consulting firm must submit the following reports:
- **Deliverable 1**. Work plan and methodology, including the schedule with the description of the team members and their respective estimate of time.
- **Deliverable 2**. First event report
- **Deliverable 3**. Second event report
- 4.2. All products must be delivered to the Bank in an electronic file: Microsoft Word reports, Microsoft Excel spreadsheets, high-resolution PDF or JPG files and/or Microsoft Power Point presentations. Zip files will not be accepted as final reports due to Archives Management Section regulations. The reports will be presented in Spanish.

5. Payment timeline

- 5.1. Payment terms will be based on the approval of the project deliverables. The Bank wishes to receive the most competitive cost proposal for the services described in this document. The Official Exchange Rate of the IDB indicated in the RFP will be applied for the necessary conversions of payments in local currency.
- First payment equivalent to **20%** of the total amount of the consultancy against presentation and approval of deliverable 1.
- Second payment equivalent to **40%** of the total amount of the consultancy against presentation and approval of deliverable 2.
- Third payment equivalent to **40%** of the total amount of the consultancy against presentation and approval of the deliverable 3.

Products	Timeframe2
Deliverable 1:	1 months
Deliverable 2:	6 months
Deliverable 3 and revised versions of previous deliverables.	9 months

6. Selection Criteria

- Citizenship: You are a citizen of one of our 48-member countries.
- Consanguinity: You have no family members (up to fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB Group.

² Time counting since signature of the contract



- Education: Background in Engineering, Economics, Mathematics, or related areas. A Master's degree in Business Administration, Innovation Management, Technology Management, Technology Strategy, Data Science, Statistics, or related areas is a plus.
- Experience: At least five years of experience working in transportation projects or in infrastructure sectors. Practical experience organizing events is a plus.
- Languages: Proficiency in English and an acceptable level in another of the IDB's official languages (Spanish, Portuguese, or French).

7. Core and Technical Competencies:

- Knowledge in project management practices.
- Working knowledge of emerging technologies
- Skills in communication and digital content creation.
- Able to work within a diverse project team consisting of people from across all parts of the organization across departments and geographical areas.

8. Opportunity Summary:

- Type of contract: Consulting Firm
- Length of contract: 9 months.
- Location: Remote.
- **Responsible person:** Sr. Specialist Transport (INE/TSP)
- Requirements: You must be a citizen of one of the <u>IDB's 48 member countries</u> and have no family members currently working at the IDB Group. Applicants from Trinidad and Tobago are encouraged to apply.



Knowledge disseminations Publications, translations, events organizations (CR-T1255)

TERMS OF REFERENCES

Background of this search:

Costa Rica has set the goal of modernizing its public transport system. In September 2021, the country adopted an Electronic Payment System in its urban train system (SINPE-TP). The new SINPE-TP is structured around a central collection system that receives the information of the payment transactions carried out in the transport services, performs the calculation of rates, processes the payments, and distributes the revenues.

The SINPE-TP is based on a solid and innovative partnership between the Central Bank, the Public Services Agency, the Costa Rican Railway Institute (INCOFER), and the MOPT. Thanks to this innovative in-house partnership, the system is characterized by technological sovereignty, meaning that it does not depend on specific external providers for its operations. On the contrary, the public entity involved (i.e. Central Bank) is the main responsible of managing their operation and, when required, implementing new possible functionalities. SINPE-TP is the first electronic payment system in the Region based on two means of payment: (i) those that meet EMV specifications (Europay-Mastercard-Visa) and have proximity payment technology (contactless); and (ii) mobile phones with a QR code app.

Nevertheless, the country's current public transport remains still too distant from a digitalized, integrated and interoperable system. Despite the significant and recent progress undertaken, its development is still in an early stage. The SINPE-TP has indeed been designed as a system to be implemented gradually. At the moment, it has been piloted only in few rail sections (e.g. Alajuela/San José) and will be soon expanded in other train lines, to cover the GMA of San José. With the support of IDB, the MOPT together with the Costa Rica Central Bank is currently also testing the possibility to extend the system to buses providers operating in the metropolitan area. However, the public transport payment system is still primarily based on cash, where users are paying cash on each mean of transport used and no ticket is issued for a trip from one point to another of the GMA. The lack of widespread availability of an electronic payment system is reducing the capacity of transport operators to correctly design and plan an efficient transportation system, resulting in significant costs for the country, also due to the high circulation of coins. This situation also causes a restrictive lack of data, like information on the number of passengers on each route, travel intentions and frequency of use, among other useful resources, that doesn't allow an effective reorganization of the stops and the trunk routes based on the actual demand, or an improvement of the service offered.



In this context, the Inter-American Development Bank (through the support of Public Capacity Building Korea Fund for Economic Development) is looking for the provision of consulting services that aims to support the Ministry of Public Works and Transport (MOPT) of Costa Rica in expanding the current Electronic Payment System (SINPE-TP) towards an interoperable system for both trains and buses operating in the Grand Metropolitan Area (GMA) of San José.

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 (MaaS) transport system, which will position Costa Rica as one of the regional frontrunners in providing an efficient and accessible public transport service.

The team's mission:

Established in 1959, the Inter-American Development Bank ("IDB" or "Bank") is the main source of financing for economic, social and institutional development in Latin America and the Caribbean (LAC). It provides loans, grants, guarantees, policy advice, and technical assistance to the public and private sectors of its borrowing countries.

What you'll do:

The general objective of this consultancy is the development of the design and edition of publications and related activities for the dissemination of knowledge around the pilots to be carried out by the IDB together with the Government of Costa Rica.

The scope of this consultancy mainly considers the communicational aspects and the dissemination strategy of the results and lessons learned compiled throughout the development of theoretical research and practical experimentation on an Electronic Payment System in the transport system in San Jose.

Activities and Responsibilities:

- Review of the products delivered by the bank's team related to this consultancy and other related inputs
- Preparing reports, presentations, and documents that support the Bank's efforts to promote digital transformation in the infrastructure services.
- Development of dissemination strategies
- Design of intermediate and final versions of knowledge products
- Coordination of meetings
- Broadcast event management
- Activity reports.



Deliverables and timeline

To meet the objectives of this consultancy, the consulting firm must submit the following reports:

- **Deliverable 1**. Work plan and preliminary version of the dissemination strategy for the project.
- **Deliverable 2**. Final version of the dissemination strategy of the project and preliminary version of at least 2 publications to be designed.
- **Deliverable 3**. Final version of 2 publications.
- **Deliverable 4**. Final version of all remaining documents to be published by the team in regard of the project.

All products must be delivered to the Bank in an electronic file: Microsoft Word reports, Microsoft Excel spreadsheets, high-resolution PDF or JPG files and/or Microsoft Power Point presentations. Zip files will not be accepted as final reports due to Archives Management Section regulations. The reports will be presented in Spanish.

The timeline is defined as follows:

Products	Timeframe
Deliverable 1:	1 months
Deliverable 2:	2 months
Deliverable 3:	5 months
Deliverable 4:	9 months

Each product will be related to a payment as follows:

- I. First payment equivalent to **20%** of the total amount of the consultancy against presentation and approval of deliverable 1.
- II. Second payment equivalent to **20%** of the total amount of the consultancy against presentation and approval of deliverable 2.
- III. Third payment equivalent to **30%** of the total amount of the consultancy against presentation and approval of the deliverable 3.
- IV. Fourth payment equivalent to **30%** of the total amount of the consultancy against presentation and approval of the deliverable 4.

What you'll need:

- Citizenship: You are a citizen of one of our 48-member countries. We may offer assistance with relocation and visa applications for you and your eligible dependents
- Consanguinity: You have no family members (up to fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB Group.



- Education: Degree in Design, Publicity, Social Communications or other related area.
- **Experience:** 5 years of experience in the design of publications and/or institutional communication strategies.
- Languages: Proficiency in English and an acceptable level in another of the IDB's official languages (Spanish, Portuguese, or French).

Opportunity Summary:

• Type of contract: PEC

• Length of contract: 12 months.

• Location: Washington DC.

• **Responsible person:** Sr. Specialist Transport (INE/TSP)

• Requirements: You must be a citizen of one of the <u>IDB's 48 member countries</u> and have no family members currently working at the IDB Group. Applicants from Trinidad and Tobago are encouraged to apply.

Our Culture:

Our people are committed and passionate about improving lives in Latin-America and the Caribbean, and they get to do what they love in a diverse, collaborative and stimulating work environment. We are the first Latin American and Caribbean development institution to be awarded the EDGE certification, recognizing our strong commitment to gender equality. As an employee you can be part of internal resource groups that connect our diverse community around common interests.

Because we are committed to providing equal opportunities in employment, we embrace all diversity and encourage women, the LGBTQ+ community, persons with disabilities, afro-descendants, and indigenous people to apply.

About us:

At the IDB, we're committed to improving lives. Since 1959, we've been a leading source of long-term financing for economic, social, and institutional development in Latin America and the Caribbean. We do more than lending though. We partner with our 48-member countries to provide Latin America and the Caribbean with cutting-edge research about relevant development issues, policy advice to inform their decisions, and technical assistance to improve the planning and execution of projects. For this, we need people who not only have the right skills but also are passionate about improving lives.

Our team in Human Resources carefully <u>reviews all applications</u>.

Due to the current COVID-19 pandemic and its implications for our Region, the IDB Group is reviewing its hiring needs and re-prioritizing its areas of talent acquisition. We encourage candidates to continue to apply to the active postings, yet current job openings <u>may be subject to further decisions in terms of timing of the processes</u>, or other actions, in accordance with business needs. Final hiring decisions may also be conditioned to the candidate's ability to timely relocate to the post of duty at the moment of starting service.