Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 31-Oct-2019 | Report No: PIDA27594
### BASIC INFORMATION

#### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru</td>
<td>P170658</td>
<td>CENTRALIZED EMERGENCY RESPONSE SYSTEM IN PERU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATIN AMERICA AND CARIBBEAN</td>
<td>12-Nov-2019</td>
<td>10-Jan-2020</td>
<td>Digital Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Ministry of Economy and Finance</td>
<td>Programa Nacional de Telecomunicaciones (PRONATEL)</td>
</tr>
</tbody>
</table>

**Proposed Development Objective(s)**

The proposed project development objective is to improve efficiency in planning, coordination and response in the event of emergencies and disasters in Metropolitan Lima and Callao.

**Components**

- Building for the 911 Emergency Response Service
- Digital Infrastructure for the 911 Emergency Response Service
- Use and appropriation of 911 platform
- Project Supervision

### PROJECT FINANCING DATA (US$, Millions)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUMMARY</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td>45.10</td>
</tr>
<tr>
<td><strong>Total Financing</strong></td>
<td>45.10</td>
</tr>
<tr>
<td><strong>of which IBRD/IDA</strong></td>
<td>36.30</td>
</tr>
<tr>
<td><strong>Financing Gap</strong></td>
<td>0.00</td>
</tr>
</tbody>
</table>

**DETAILS**

World Bank Group Financing
**B. Introduction and Context**

**Country Context**

1. **Peru is an upper middle-income country (MIC) with remarkable economic growth over the last decade.** Despite somewhat slower economic activity in the past few years, Peru has been one of the fastest growing economies in the Latin America and Caribbean (LAC) region in the last two decades. Between 2002-2018, real Gross Domestic Product (GDP) grew at an average rate of 5.3 percent, far exceeding the 2.7 percent growth rate for the region. Macroeconomic stability, coupled with open financial and capital markets and a sustained policy of trade liberalization, amid favorable external environment for commodity exporters were the key factors behind Peru’s success. However, after expanding 4 percent in 2018, economic growth is expected to decelerate to around 2.6 percent in 2019. On the one hand, the takeover of new subnational authorities affected the execution of public expenditure in the first half of the year. On the other, temporary factors related to the availability of marine species and protests linked to mining activity led to a slight decline in exports in the same period. In addition, business confidence has been affected by trade tensions between US and China and domestic political turmoil.

2. **Regarding poverty reduction, Peru made substantial gains since the 2000s.** For most of the decade, the country’s rapid economic growth was driven mostly by mining and urban services. Prosperity was widely shared, as growth in services, agriculture, and mining, coupled with well-targeted social policies, boosted income growth among the bottom 40 percent. During 2006–2016, annualized income growth for the bottom 40 percent of the population was 6.5 percent, significantly above the 3.9 percent mean growth. In 2018, poverty declined and labor markets in Lima showed signs of recovery - particularly driven by the construction sector. Poverty went from 21.7 percent in 2017 to 20.5 in 2018, recovering after increasing in 2017. The decrease is led by poverty reduction in rural areas, while poverty levels stagnated in Lima. Projections based on the upper middle-income country poverty line of $5.5 per day (2011 Purchasing Power Parity) show that the poverty rate is expected to fall by about 1.5 percentage points between 2018 and 2020. The Metropolitan Lima region is home to the largest number of poor people in the region with approximately 2.25 million, including Callao.
3. **Peru’s geography, natural endowments, and diverse population have shaped its unbalanced economic development and service delivery based on capital-intensive growth that resulted in spatially unbalanced outcomes for the population.** The population in Metropolitan Lima and Callao reached 10,479,899 in 2017, accounting for one third of the total population of the country. In addition, the cost of service delivery and digital and physical connectivity in the vast Sierra and Selva regions is high, which has concentrated economic activity in the Coastal region, especially in Metropolitan Lima.

4. **GBV rates in Peru are among the highest in Latin America and is present in all regions and across all socioeconomic strata.** Two out of three women in Peru experience intimate partner violence (IPV), however, only 29 percent seek help from an institution, usually from the police. Women with higher incomes and education than their partners are at a higher risk to experience violence in the domestic realm. Women who live in neighborhoods with high levels of violence and criminality are at a higher risk of being victims of violence by their partners. Moreover, there exists among society a high acceptance of GBV, with 40 percent of the Peruvian population believing GBV is justified when a wife is unfaithful to their partner or if she disregards her children.

5. **The Peru Country Partnership Framework (CPF) highlights the high vulnerability of Peru to multiple natural hazards that impact its development, especially its efforts to reduce poverty and promote inclusive growth.** Peru is a region of major seismic activity, with as many as 200 minor earthquakes occurring on average each year. Observed and projected climate change impacts in Peru include increasing temperatures, extreme precipitation, as well as more frequent and severe occurrences of natural disasters, including flooding and droughts linked to the recurrent “El Niño” and “El Niño Costero” phenomena. The country’s climate vulnerability context is further exacerbated by structural factors linked to poverty and inequality. Since 2007, the GoP has implemented important actions to improve disaster risk management (DRM) supported by the WB with two CAT-DDO operations, and technical assistance for Early Warning Messaging Systems. The Project will be aligned with the CPF and the GOP’s National Plan regarding the priority areas in DRM and emergency response to better and more efficiently respond to all types of disasters and emergencies in the region.

6. **Peru is taking important steps to address climate change risks and improve disaster risk management.** Peru’s NDC identifies priority sectors and actions to address climate change adaptation effectively, including the following crosscutting areas closely linked to the project: disaster risk management, resilient infrastructure, and gender approach. The components of the project are designed to contribute to the adaptation of climate change and will improve coordination and response in the event of natural and climate induced hazards, human hazards and emergencies of other nature by adopting specific protocols, procedures and staff capacity building. Peru has been very proactive in developing its disaster risk reduction policies and procedures considering its location in one of the most active seismic zones of the world. The GoP is in the process of implementing an Early Warning Messaging System (SISMATE), aimed at guiding the population in the event of a disaster or an emergency. The present Project will promote the linkage between SISMATE and the proposed 911 system.

1 Latest data available from the National Statistics and Information Office (INEI)
1. **Sectoral and Institutional Context**

7. There are three main emergency first response entities in Peru with competencies to respond in case of an emergency, (i) the National Police Department (NPD), (ii) Mobile Emergency Care System (SAMU-health care provider), and (iii) the Peruvian Corps of Voluntary Firefighters (PCVF). Each agency has a different assistance telephone number and targets a different population, which creates confusion among the citizens regarding the identification of the most suitable number in the event of an emergency and reduces the efficiency of coordination between entities.

8. Furthermore, the Ministry of Women and Vulnerable Population operates a free GBV hotline (Line 100) dedicated to orientation, information, counseling, and emotional support for people affected by domestic violence, sexual assault, or who are aware of a situation of abuse in their environment. According to the social assessment for the Project carried out between June and September of 2019, some of the challenges of the GBV line included i) high response times, ii) lack of coordination protocols inside the line and with other emergency response entities as the Police, iii) high percentage of malicious calls, iv) lack of coordination with GBV service providers for cases referral, v) lack of updated software, vi) lack of adequate equipment, and vi) lack of GBV cases data analysis to improve GBV prevention and response among others.

9. In Peru, all first response units have their own communications systems and infrastructure to respond to emergencies which are not interconnected. Current communication tools include radios and internal telephone calls which lead to duplicating efforts to target the emergency. The lack of a unique interoperable platform that collects the basic information and facilitates the connection between emergency response leads to delays in attention and service response planning, including GBV incidents. This results in a lack of coordination between first response units and delay in response of emergencies. The average response time of an emergency by first response units is 45 minutes\(^2\). Furthermore, the average duration of the connection time in an emergency call in Peru is of 230.40 seconds (3.8 minutes). This includes the time taken by the operator to answer the call and register the data in the system. With this project the GoP is aiming at reducing this time to 128 seconds (2.1 minutes) by 2023 and attending the calls within 5 seconds, which will be aligned with European standards.\(^3\) The Project is focused in the region of Metropolitan Lima and Callao, being a first phase while the GoP’ vision is to extend the project at the national level and replicate the emergency response system in the north and south of the country.

10. The Ministry of Transport and Communications (MTC) has the mandate to integrate the existing emergency response numbers into the 911 system. The project will firstly integrate the three key emergency response numbers detailed above (NPD, PCVF, and SAMU) and will progressively include the rest of the numbers.

---

\(^2\) Information provided by the Ministry of Transport and Communications

\(^3\) In Catalonia, Spain, it takes an average of 90 seconds from the moment the center receives the call until the operators register all the necessary information to dispatch the assistance, in the Basque region the average is less than 120 seconds. In Ecuador, all calls are attended and registered in less than 138 seconds. Within the EU Member State 23 Member States reported less than 10 seconds for the average answering time needed to get in contact with the emergency services, while the GoP is aiming at responding more than 95% of the calls in 5 seconds. Regarding the time reported to receive handset based location Member States reported the following timing: Estonia (10s), Finland (5s), Ireland (10s), Lithuania (25s), Latvia (20s), Malta (8s), Slovenia (6s) and United Kingdom (15s).
The GBV Line 100 under the Ministry of Women will benefit from the 911 systems digital infrastructure and will coexist along with the 911 emergency number. Apart from Line 100, the existing emergency numbers will gradually disappear, and all calls made to the first response units will be automatically transferred to the 911 system.

11. Although there is a law that regulates malicious calls made to emergency numbers, there is a lack of an enforcement framework for this type of calls. The MTC has promoted the inclusion of a deterrent message at the start of an emergency call which has contributed to the reduction of malicious calls, however, the absence of a regulatory framework establishing enforcement and registry mechanisms for malicious calls, and the lack of public awareness campaigns for the citizens to understand the use and value of the emergency response numbers, hinders the effectiveness of the service and consequently leads to the incapacity of attending real emergencies. In 2018, there were 9,282,285 calls made to the different emergency response units, out of which 8,434,347 (94%) were malicious calls\(^4\) much higher than other countries in the Region such as Ecuador (30%) or the Dominican Republic (23%) who have already implemented a unique emergency response number together with enforcement mechanisms and raise awareness campaigns.

12. In addition, the regulatory framework in Peru does not enforce the telecommunications operators to provide real-time and immediate geolocation of the calls received whenever there is an emergency. Operators need to request the user’s location and manually introduce the address or approximate location where the emergency is happening, leading to inaccuracies and increasing the time of the response. Sometimes, this information is entered manually two or three times by the different response lines and departments. International experience demonstrates that geolocation is a critical factor to reduce time response and improve efficiency.

**C. Proposed Development Objective(s)**

Development Objective(s) (From PAD)

13. The proposed project development objective is to improve efficiency in planning, coordination and response in the event of emergencies and disasters in Metropolitan Lima and Callao.

Key Results

14. The key indicators for tracking progress towards the project objectives are as follows:

\(^4\) Malicious calls are defined in the present Concept Note as the calls received by the first response emergency units which are not considered real emergencies. It includes disturbing, false, mistaken, silent, repeated calls and calls requesting information.
PDO Indicator 1: Reduction of the duration of connection time (Seconds)
PDO Indicator 2: Reduction of malicious calls (Percentage)
PDO Indicator 3: Application of standard protocols and procedures (Yes/ No)
PDO Indicator 4: Increase in coordinated responses that will benefit of two or more agencies (Number)

D. Project Description

15. **The duration of the Project will be four (4) years.** This Project will ensure improved efficiency in planning and increase in coordinated response to incidents as well as reduction of response times in the event of emergencies through the integration of all the main existing emergency numbers into a unique number. This will allow the population to access emergency response services in a simpler way and will consequently increase the efficiency on the provision of the emergency service while reducing the time of response.

**Figure 1: Project components and stakeholders**

16. **Component 1: Building for the Centralized 911 Emergency Response Service (US$16.9 million of which US$14.3 is IBRD, US$2.6 Counterpart Funding).** This component will finance the works for the construction of a 911 building and all the basic furnishings needed to operate the 911 emergency response system. The 911 center will be constructed 100m away from the new national emergency operations center (COEN) where the Early Warning Messaging System (SISMATE) will be housed. In this regard, synergies, in terms of digital infrastructure (communications, data center, systems and operations), will be taken into account during specific design of the building. In addition, the building design specifications will be sensitive to populations with disabilities and will comply with energy efficient models, surpassing existing energy efficiency standards, while the building and data center will be adapted to climate risks.

17. **Component 2: Digital Infrastructure for the 911 System (US$22.3 million of which US$18.9 is IBRD, US$3.4 Counterpart Funding).** Currently, key entities in charge of response activities in Metropolitan Lima and Callao have insufficient digital shared tools to rapidly intercommunicate in the event of an emergency due to the absence of a 911 system, which is crucial to handle, disseminate and coordinate information in the event of emergencies and is thereby adversely impacting adaptive capacity of the affected population. This Component will finance the necessary digital infrastructure to enhance the capacity of the targeted first response emergency entities to effectively plan and respond to emergencies through the effective coordination of the 911, including the following.
(i) **911 Platform**, which includes all the necessary equipment (software and hardware), and its installation in the 911 building, for the 911 operators (first line of response) to communicate and transfer standardized and unified relevant information to the first response units (dispatchers- second line of response) and other relevant entities in the event of an emergency.

(ii) **Data communications equipment (Data Center)**, will be redundant and secure, with adequate back up and power systems as well as cooling system for optimal performance with the necessary electrical protection.

(iii) **Interconnection of the video cameras of the National Police Emergency Response Center and panic buttons to the 911 Emergency Platform.**

(iv) **Streamlining 911 Response with GBV line 100 through the integration and interconnection of the line 100 to the 911 system.** The GBV Line will coexist together with line 911 but will be interconnected to the 911 center to respond to situations of emergency deriving from gender- based violence and benefit from the digital infrastructure of the 911 platform. The calls that enter through the dialing of the code 100 will be attended by the operators of Line 100 who will be moved to the 911 building, maintaining their procedures and protocols of attention. The calls that enter through the dialing of the 911 code will be attended, in the first line, by the operators of the 911 building, who will be trained in GBV matters. The national scope of the service provided by Line 100 will be maintained and information management protocols and security measures will be established to protect the confidentiality of the information of women who prefer to report anonymously.

18. **Component 3: Use and appropriation of platform 911 (US$2 million of which US$1.5 is IBRD, US$0.5 Counterpart Funding).** This Component aims at (ii) increasing coordination between the different emergency response units through the development of protocols, (ii) increase efficiency of the emergency response service through training of operators in adequate use and compliance with the protocols that regulate the 911 system and management of technological tools, and (iii) the promotion of the proper use of the 911 emergency service and therefore the reduction of malicious calls through awareness raising campaigns. This component will implement the following activities

   (i) Development of Emergency protocols for the 911 emergency center.

   (ii) Capacity Building and training for the 911 and Line 100 operators of the adequate use of the 911 platform for emergency management and attention, including the application of emergency response protocols.

   (iii) Raise Awareness campaigns for the population to realize the importance of the 911 system and Line 100. It will be focused on informing the population of Metropolitan Lima and Callao about the correct use of lines 911 and 100.

19. **Component 4: Project supervision and management. (US$3.9 millions of which US$1.5 is IBRD, US$2.4 Counterpart Funding).** This Component will finance the effective supervision and management strengthening of the Project to ensure activities under the Project are correctly executed and will support all costs related to supervision, monitoring of activities, external technical specialists, and capacity building activities for the Project Implementation Unit (PIU) which will fall within PRONATEL’s Studies and Projects Directorate. The Project will have a complex implementation structure that engages several response units focused on emergency response. The Project Implementation Unit will develop appropriate methodologies and procedures for execution.
Legal Operational Policies

<table>
<thead>
<tr>
<th>Triggered?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects on International Waterways OP 7.50</td>
</tr>
<tr>
<td>Projects in Disputed Areas OP 7.60</td>
</tr>
</tbody>
</table>

Summary of Assessment of Environmental and Social Risks and Impacts

20. **The environmental and social proposed risk classification for the project is Moderate under the World Bank ESF.** Classification responds to: (i) potential environmental risks and impacts stemming from the construction (and operation) of the 911 building under Component 1; (ii) a lack of capacity of the Borrower to manage E&S risks and impacts in a manner consistent with ESS1 and (iii) lack of experience responding to GBV-specific calls and emergencies. Potential environmental risks and impacts will occur within a larger air force complex in an urban area, away from environmentally sensitive areas, and thus no impacts are expected over natural or critical natural habitats, and no green areas will be affected.

21. **To adequately address and mitigate project ES risks and impacts, the borrower, with the support of qualified E&S specialists, has prepared specific ES instruments aligned with ESF requirements and relevant ES standards (ESS).** These include: (i) the preliminary Environmental and Social Analysis and Environmental and Social Management Plan (P-ESA + ESMP) of the construction and operation of the 911 building, which will be updated into a specific ESA+ESMP once the 911 building technical designs become available; (ii) a Social and Gender Assessment that analyzes the specific gender related impacts of integrating Line 911 with Line 100, and (iii) a Stakeholder Engagement Plan (SEP), that provides a plan to continuously engage direct, indirect and territorial stakeholders throughout project implementation. These instruments will be closed on the World Bank’s website, as well as on PRONATEL’s website, prior to the start of Appraisal on November 11, 2019. The SEP includes the dissemination of the project objective and activities, and the key findings (risks and mitigation measures) identified in the environmental and social instruments, (P-ESA+ESMP, Social Assessment with Gender Focus, and SEP). A workshop was organized near the locality where the 911 Building will be built on October 24, 2019 that convened PRONATEL staff of the Lima Metropolitan area as well as other stakeholder groups including: direct project beneficiaries, local organizations, government institutions, (Ministry of Transport, Environment, Culture, Interior, Defense, Health, and Ministry of Women and Population). These Ministries and organizations represent indigenous peoples, women’s rights/GBV groups, and other vulnerable groups (i.e., disabled, elderly, LGBTI+ groups and migrants). It is also expected for the civil works contractor to organize a specific workshop regarding the construction of the 911 building prior to the start of construction; (b) flyers and posters with information about the project will be prepared and distributed in the Municipal Districts of the area of influence (Chorrillos and Santiago de Surco); and (c) will be complemented with a phone line, electronic mail, a webpage link, and additional workshops to provide information and a space for feedback on the project.

22. **The World Bank has been closely monitoring the development of the mentioned instruments to ensure both quality of the analysis and on-time delivery, as well foster client capacity building.** Technical and economic requirements derived from these plans will be incorporated into the procurement documents for the contractor and supervision firm for the construction of the 911 building, as necessary.
23. Regarding PRONATEL’s capacity to adequately manage the project’s ES risks and impacts, the PIU will be responsible for overall project implementation, including compliance with the World Bank’s ESS. An environmental and a social specialist will be part of the PIU’s structure. To strengthen the PIU’s capacity to manage ES aspects, the ESCP includes specific actionable capacity-building measures, together with the corresponding budget.

E. Implementation

Institutional and Implementation Arrangements

24. The implementing agency- the National Program of Telecommunications (PRONATEL) is within the scope of MTC, dependent on the Vice Ministry of Communications. The project will be housed in PRONATEL, in line with its mandate to manage the centralized emergency response system. The Legislative Decree 1277, which sanctions the execution of malicious communications to the emergency or information centers establishes that the Viceministry of Communications is the responsible entity in charge of gradually implementing and operating the integrated communication system through a unique emergency number. PRONATEL, was designated through a Memorandum as the implementing agency of the project by the Viceministry of Communications. PRONATEL will prepare an annual work plan and act as the main coordinating body and convening authority among the project stakeholders. PRONATEL will systematically monitor and evaluate project implementation progress, as well as identify and address implementation shortcomings, challenges, and possible disputes.

25. The Project Implementation Unit (PIU) will be established under PRONATEL’s Studies and Projects Directorate. The PIU will coordinate the technical, logistical, implementation, and monitoring and evaluation aspects of the project. The Directorate has appointed a dedicated team with the qualified competencies for the implementation of the project including at least, the following ten staff: (i) A Project Coordinator, (ii) a Legal advisor, (iii) an Architect or Civil Engineering, (iv) a Telecommunications or an Electrical Engineering, (v) a Communications specialist, (vi) an Environmental Safeguards Specialist, (vii) a social Safeguards Specialist, (viii) two Financial Management Specialist, (ix) a Procurement Specialist, and (x) an assistant. In case of insufficient capacity for collecting data, PRONATEL will recruit or designate a person responsible for monitoring and evaluation, based on regular capacity assessments.

26. Given the cross-cutting and multi-stakeholder nature of the project, an Administrative Committee (AC) will be established. The AC for the Centralized emergency Response project will be chaired by the Project Coordinator for the PIU, and comprise the representatives of the Ministry of Interior, Ministry of Health, Peruvian National Police, Ministry of Transport and Communications and Ministry of Women and Vulnerable Populations. The AC will meet once a month to monitor implementation progress, evaluate recommendations and requests that have policy and institutional implications; provide guidance, identify project issues, discuss and agree on corrective measures.

27. The project contemplates the subscription of inter-institutional agreements and establishment of coordination strategies and protocols between the different response units and the MTC for adequate project implementation and efficiency of the 911 system. Furthermore, the 911 Center will be guided by a Committee
which will count with representatives from all involved agencies which will define objectives and long-term planning for the correct management of the 911 System.

CONTACT POINT

World Bank

Rocio Sanchez Vigueras
Digital Development Specialist

Doyle Gallegos
Lead Digital Development Specialist

Borrower/Client/Recipient

Ministry of Economy and Finance
Sheila Joana Miranda Leo
General Director Public Investment
smiranda@mef.gob.pe

Implementing Agencies

Programa Nacional de Telecomunicaciones (PRONATEL)
Raul Marco Garcia Loli
Executive Director
rgarcial@mtc.gob.pe

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):

Rocio Sanchez Vigueras
Doyle Gallegos
<table>
<thead>
<tr>
<th>Approved By</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Social Standards</td>
<td></td>
</tr>
<tr>
<td>Advisor:</td>
<td></td>
</tr>
<tr>
<td>Practice Manager/Manager:</td>
<td></td>
</tr>
<tr>
<td>Country Director:</td>
<td>Boris Enrique Utria</td>
</tr>
</tbody>
</table>