

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**URUGUAY**

**E-GOVERNMENT MANAGEMENT PROJECT IN THE HEALTH SECTOR III**

**(UR-L1163)**

**THIRD INDIVIDUAL LOAN UNDER THE CONDITIONAL CREDIT LINE FOR  
INVESTMENT PROJECTS (CCLIP) FOR THE E-GOVERNMENT MANAGEMENT  
PROGRAM IN THE HEALTH SECTOR**

**(UR-X1009)**

**LOAN PROPOSAL**

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## ABBREVIATIONS

AGESIC	Agencia para el Desarrollo del Gobierno de Gestión Electrónica y la Sociedad de la Información y del Conocimiento [Agency for the Development of e-Government and the Information and Knowledge Society]
ASSE	Administración de los Servicios de Salud del Estado [Government Health Services Administration]
CCLIP	Conditional Credit Line for Investment Projects
CGN	Office of the Comptroller General
CNCD	Chronic noncommunicable disease
EHR	Electronic health record
HCEN	National Electronic Health Record System
ICB	International competitive bidding
JUNASA	Junta Nacional de Salud [National Health Council]
MDS	Minimum data set
MEF	Ministry of Economy and Finance
MSP	Ministry of Public Health
PAHO	Pan-American Health Organization
PCU	Project coordination unit
PIT-CNT	Plenario Intersindical de Trabajadores - Convención Nacional de Trabajadores [National trade union center]
SIIF	Integrated Financial Management System
SNCP	National Public Procurement System
SNIS	Sistema Nacional Integrado de Salud [National Integrated Health System]
SNS	Seguro Nacional de Salud [National Health Insurance]
TCR	Tribunal de Cuentas de la República [Office of the Auditor General]

## PROJECT SUMMARY

### URUGUAY E-GOVERNMENT MANAGEMENT PROJECT IN THE HEALTH SECTOR III (UR-L1163)

### THIRD INDIVIDUAL LOAN UNDER THE CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP) FOR THE E-GOVERNMENT MANAGEMENT PROGRAM IN THE HEALTH SECTOR (UR-X1009)

Financial Terms and Conditions				
<b>Borrower:</b> Eastern Republic of Uruguay			Flexible Financing Facility <sup>(a)</sup>	
			<b>Amortization period:</b>	25 years
<b>Executing agency:</b> The borrower, through the Agency for the Development of e-Government and the Information and Knowledge Society (AGESIC)			<b>Disbursement period:</b>	3 years
			<b>Grace period:</b>	5 years <sup>(b)</sup>
<b>Source</b>	<b>Amount (US\$)</b>	<b>%</b>	<b>Interest rate:</b>	LIBOR-based
<b>IDB (Ordinary Capital):</b>	6,000,000	81.6	<b>Credit fee:</b>	(c)
			<b>Inspection and supervision fee:</b>	(c)
<b>Local:</b>	1,350,000	18.4	<b>Weighted average life:</b>	15 years
<b>Total:</b>	7,350,000	100	<b>Currency of approval:</b>	U.S. dollars
Project at a Glance				
<p><b>Project objective.</b> The project will help improve the overall management of health services, including services related to the prevention and early care of chronic noncommunicable diseases. To achieve this improvement, the project will pursue the following specific objectives: (i) enhance the quality of the interoperable information in the National Electronic Health Record System (HCEN); and (ii) expand the use of HCEN data for patient management and for the monitoring of health objectives and delivery-of-care goals.</p> <p>This project is the third individual loan operation under the Conditional Credit Line for Investment Projects (CCLIP) for the e-Government Management Program in the Health Sector UR-X1009, approved by the Board of Executive Directors pursuant to Resolution DE-123/13.</p>				
<p><b>Special contractual condition precedent to the first disbursement of the loan proceeds:</b> The borrower, either directly or through the executing agency, will provide evidence to the Bank of the appointment of a project coordinator (paragraph 3.6).</p>				
<p><b>Exceptions to Bank policies:</b> None.</p>				
Strategic Alignment				
<b>Challenges:</b> <sup>(d)</sup>	SI <input type="checkbox"/>	PI <input checked="" type="checkbox"/>	EI <input type="checkbox"/>	
<b>Crosscutting themes:</b> <sup>(e)</sup>	GD <input type="checkbox"/>	CC <input type="checkbox"/>	IC <input checked="" type="checkbox"/>	

<sup>(a)</sup> Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule as well as currency, interest rate, and commodity conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

<sup>(b)</sup> Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.

<sup>(c)</sup> The credit fee and the inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with relevant policies.

<sup>(d)</sup> SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

<sup>(e)</sup> GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problem addressed, and rationale

- 1.1 Conditional Credit Line for Investment Projects (CCLIP) UR-X1009 was approved in October 2013 in the amount of US\$18 million in Bank financing, with the objective of helping to improve the quality and efficiency of the healthcare system by enhancing health services monitoring and management capacity and moving towards a prevention-based health care model. The operation set out in this document is the third and last individual loan under this CCLIP and is aimed at consolidating the achievements of the first two operations (loans 3007/OC-UR and 4300/OC-UR, implemented between 2013 and 2020).
- 1.2 **Macroeconomic context.** The Uruguayan economy began to experience a slowdown in 2015 and has since remained in a low-growth phase of the economic cycle (expanding at an annual rate of 1.3% over the 2015-2019 period). This situation worsened with the onset of the pandemic; the International Monetary Fund (IMF) expects output to fall by 4.5% in 2020 and then rise by 4.3% in 2021.<sup>1</sup> The decline in economic vitality in recent years, coupled with an increase in public expenditure, explains in part the stress on the fiscal accounts, which the pandemic has exacerbated. In 2020 the deficit is expected to reach 6.7% of the gross domestic product (GDP), and the debt 69.5% of GDP. In view of this scenario and the country's high tax burden, the government intends to take action aimed at enhancing the efficiency and quality of public expenditure.<sup>2</sup>
- 1.3 **Uruguay's health system** consists of a number of comprehensive and partial health care providers that collectively comprise a National Integrated Health System (SNIS). Created in 2007, the SNIS is primarily designed to guarantee universal coverage of a set of services, regardless of the payment capacity of the recipients.<sup>3</sup> The SNIS is funded by the National Health Insurance (SNS), which receives financial contributions from workers, employers, and the State through the National Health Fund (FONASA).<sup>4</sup> The SNS is regulated and supervised by the National Health Council (JUNASA).<sup>5</sup>
- 1.4 Each comprehensive provider delivers care to a group of individual members, receiving in exchange a capitation payment covered by the SNS.<sup>6</sup> In addition to comprehensive providers, there is a small number of private health insurers that contract for or reimburse healthcare services provided by comprehensive or partial providers. Of a total of 43 comprehensive entities, 37 are providers and 6 are private insurers.

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<sup>1</sup> See <https://www.imf.org/en/Publications/WEO/weo-database/2020/October/>.

<sup>2</sup> See <https://www.gub.uy/ministerio-economia-finanzas/politicas-y-gestion/proyecto-ley-mensaje-exposicion-motivos-analisis-presupuestal>.

<sup>3</sup> According to the Continuous Household Survey, 98.5% of the population has health coverage.

<sup>4</sup> The Comprehensive Healthcare Plan lists all services that comprehensive providers are required to provide to their members.

<sup>5</sup> Consisting of representatives from the Ministry of Public Health (MSP), the Social Security Bank, the Ministry of Economy and Finance (MEF), healthcare providers, users, and workers.

<sup>6</sup> Nine percent of this capitation payment is contingent on the fulfillment of healthcare delivery targets periodically set out by JUNASA.

- 1.5 Comprehensive providers deliver services both directly and by subcontracting certain specific services from partial providers. Partial providers sell their services to private insurers, providers, and individuals. Of the 37 comprehensive providers, 36 are private entities, known as collective medical assistance institutions, and the other is the Government Health Services Administration (ASSE), a State agency.<sup>7</sup>
- 1.6 Partial providers play an important role in ensuring that health records are complete, since the medical data on the services they provide is integrated into the health records created by the comprehensive providers, particularly the user's primary provider.
- 1.7 The SNS provides coverage to 71.6% of the country's population. The rest of the population is covered either through direct contributions to the comprehensive providers by the service recipients or through government contributions to deliver noncontributory coverage to low-income individuals through the public provider ASSE. Health expenditure in Uruguay (9.5% of GDP in 2018) is among the highest in the region.
- 1.8 With a low fertility rate (1.6 children per woman of reproductive age) and an upper-middle income level, Uruguay's demographic and epidemiological characteristics generally resemble those of developed countries. Thus, individuals above the age of 65 account for a large and growing share of the total population,<sup>8</sup> and the prevalence of chronic noncommunicable diseases (CNCDs) in the population segment ages 15 to 64 is high: 29.9% are hypertensive, 6.0% are diabetic, and 18.4% have high cholesterol.<sup>9</sup> These medical conditions are a cause of preventable death and are associated with Uruguay's relatively high mortality rate from coronary heart disease (77 per 100,000 inhabitants, compared to a Latin American average of 65 per 100,000 inhabitants) and cerebrovascular disease (83 per 100,000 inhabitants, compared to a Latin American average of 44 per 100,000 inhabitants).<sup>10</sup>
- 1.9 Despite the emphasis placed by the Ministry of Public Health (MSP) on preventive measures, the percentage of individuals with CNCDs being monitored and receiving preventive care is still relatively low. For example, only 39.3% of patients with hypertension and 49.8% of diabetics are being treated. The partial failure to monitor these patients results in complications that could have been prevented or postponed, leading to cost overruns for the health system.

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<sup>7</sup> The collective medical assistance institutions and the private insurers provide coverage and care to 61% of the population, while the ASSE serves the rest.

<sup>8</sup> All told, 14.8% of Uruguay's population is 65 or older (National Statistics Institute, 2018). This age bracket's share of the total population is close to the 17% average in the Organisation for Economic Co-Operation and Development (OECD) countries and substantially higher than the 8% average in Latin America and the Caribbean. Source: World Bank.

<sup>9</sup> Source: Second National Survey on Risk Factors for Noncommunicable Diseases, MSP, 2013. Moreover, the Pan American Health Organization (PAHO) indicates that 60% of deaths in Uruguay are caused by CNCDs ("Perfil del Sistema de Salud 2015, Uruguay," p. 25).

<sup>10</sup> See [PAHO Health Information Platform for the Americas](#).

- 1.10 **Uruguay has developed a 2020 Digital Government Plan and an Agenda for a Digital Uruguay**,<sup>11</sup> which are designed to guide the digital development of various government agencies. The goals of the agenda include ensuring that: (i) all comprehensive health care providers use the National Electronic Health Record System (HCEN) platform in at least three clinical areas; (ii) all oncology services have implemented a health records management system; and (iii) the regulatory and technical tools required to enable electronic medical prescriptions are available.
- 1.11 In 2013, the first steps were taken to design and develop a platform intended to help improve the quality and efficiency of the system as a whole. The Salud.uy Program was launched under the leadership of the President of Uruguay, with representatives from the MSP, the Ministry of Economy and Finance (MEF), the Office of the President of the Republic, JUNASA, and AGESIC. AGESIC is responsible for the technical and managerial leadership of this initiative. Various entities associated with the health sector (providers, professional associations, and academia) participated in its design and implementation through the program's advisory council and technical committees.
- 1.12 **The Salud.uy Program created the first version of the HCEN platform**, where providers input information on clinical events following regulatory guidelines. One indicator of the high level of progress is the fact that 91% of the population has at least one clinical event entered into the HCEN platform. In addition, in 2019, this program rolled out a digital access feature, allowing any member of the public to access their own medical record, with a view to encouraging buy-in among system users. Furthermore, the guidelines and plans of the Salud.uy Program stepped up the pace at which providers implemented and used a health records management system: In 2019, 74% of comprehensive providers reported having electronic health records for all or most of the medical data generated (see Table 1).
- 1.13 The platform allows all providers to record and retrieve clinical event information on specific patients nationwide, regardless where in Uruguay the care was delivered and which provider delivered the services and entered the information. Furthermore, with the support of these operations: (i) technical regulations were issued for electronic medical prescriptions; and (ii) a health records management system for oncology care was implemented by all comprehensive providers.
- 1.14 The achievements attained as a result of the first two operations under the CCLIP reveal significant progress in the use of electronic medical data (see Table 1).

**Table 1. Outcomes of previous operations**

<b>Outcome indicators</b>	<b>2016</b>	<b>2019</b>
Patients with medical records in the HCEN (as a percentage of the national population)	0	91%
Percentage of comprehensive providers that have electronic medical records for all or most of their clinical data	57%	74%
Number of women ages 40 to 74 with mammograms stored in digital format	17,000	55,000

<sup>11</sup> This agenda maps all digital initiatives aligned with the country's development objectives, carried out by various actors.



- 1.15 In addition to the HCEN platform, the first two projects under the CCLIP have helped boost the use of electronic records throughout the health sector. Table 2 shows that the introduction and use of information technology by providers are advancing at a rapid pace. Thus, the percentage of health professionals who use a computer every day or almost daily while seeing their patients went from 38% in 2014 to 80% in 2018. At the same time, the percentage of comprehensive providers who use internationally validated standards for the electronic exchange of clinical data went from 33% to 86%, while the percentage of providers who store all or almost all patient health records in electronic format went from 28% to 59% over the same period.

**Table 2. Use of information technology by health professionals and institutions<sup>12</sup>**

<b>Indicators on health professionals</b>	<b>In 2014 (%)</b>	<b>In 2018 (%)</b>
Frequency of computer use while seeing patients (every day or almost daily)	38	80
<b>Indicators on comprehensive healthcare providers</b>	<b>In 2014 (%)</b>	<b>In 2018 (%)</b>
Have a health records management system	67	100
Have capacity for exchanging data	22	48
Use standards for communicating data (HL7, IHE)	33	86
<b>Indicators on health institutions in general</b>	<b>In 2014 (%)</b>	<b>In 2018 (%)</b>
Are able to store (all or almost all) patient health records in electronic format	28	59
Use standards for communicating data (HL7, IHE)	25	62
Have a health records management system	55	78
Have drug allergy reminders and alerts	20	54
Have drug interaction reminders and alerts	11	45
Have prolonged treatment reminders and alerts	17	38
Have drug dose reminders and alerts	13	38
Medical guidelines, recommended practices, and protocols can be accessed from the electronic health record (EHR)	22	39
Institutions at medium or high levels of the maturity model for use of information technology in health	21	71
Use standards for communicating data (HL7, IHE)	25	62

- 1.16 These positive outcomes are driven by not only the significant push for digitization throughout the sector and the strides made to ensure that medical records are interoperable, but also by perceptions among healthcare staff. In fact, the strategy of including medical professionals as permanent members of the project team and involving technical experts from all key disciplines (practicing physicians, physicians in managerial roles, nurses, health informatics specialists, medical records technicians, and legal advisors) in the medical informatics advisory group, which yielded inputs for adjusting the design of the HCEN, the user portal, the National Digital Prescription, the access modalities, and the privacy guidelines, produced good outcomes as shown in Table 3.

<sup>12</sup> Source: ["TIC y Salud 2018."](#)

**Table 3. Perceptions of HCEN among health personnel<sup>13</sup>**

Variable	% of those who agree or strongly agree
The HCEN enhances the efficiency of team workflows	83
The HCEN reduces redundant or unnecessary tests	77
The HCEN reduces errors in administering medications	74
The HCEN improves overall quality of care	72
The HCEN reduces medical error	68
The HCEN improves the quality of diagnostic decisions	63

- 1.17 **The COVID-19 pandemic and the HCEN platform.** This level of maturity in health information management, developed with the support of the two preceding operations under the CCLIP, proved critically important when on 13 March 2020 the Government of Uruguay declared a state of emergency due to the COVID-19 pandemic.<sup>14</sup> To respond to this health emergency, a digital strategy was implemented to relieve phone traffic, prevent saturation of in-person healthcare services, reduce the risk of health personnel contact with potential infection carriers, report on epidemiologic monitoring, and manage the physical and human resources involved in providing care for both moderate and critical cases. The HCEN platform plays a key role in this digital strategy, since it is a tool for consolidating structured recordkeeping of clinical events (including lab test results), thereby facilitating clinical and epidemiological management and strengthening the ability to respond to the current health crisis and others in the future.
- 1.18 To support the deployment of this strategy, Uruguay made the Coronavirus UY application, which includes a standardized epidemiological questionnaire created by the MSP, available to the public, through a collaborative public-private sector initiative coordinated under AGESIC's Salud.uy Program. The information generated by this application, as well as data received at public and private healthcare providers' call centers and the special call center created for the COVID-19 pandemic response, is channeled into the HCEN, facilitating automated contact between users and their primary health care provider. Once identified as COVID-19 cases, individuals can enter their daily symptoms and communicate directly with their provider's health staff through telemedicine. In addition, this information and the data recorded in the HCEN at outpatient or emergency room visits (including the reason for the visit) provide input for the standardized epidemiological data questionnaire, which is used to develop models to predict the spread of the pandemic. In addition, Uruguay also developed a digital tool which, through the HCEN or an application used by providers, maps the beds, ventilators, and staff available at the shared inpatient facilities set aside for potential COVID-19 cases.

<sup>13</sup> Source: "[HCEN-HCEO Memoria 2018](#)" and the survey conducted as part of the "[TIC y Salud 2018](#)" study. The sample comprised 600 cases, including physicians, technicians, and nurse's aides.

<sup>14</sup> As of 17 November 2020, Uruguay had reported 116 cases and 1.87 deaths per 100,000 inhabitants, while the figures for Latin America and the Caribbean are 1,987 cases and 70 deaths per 100,000 inhabitants. Sources: Ministry of Public Health, Epidemiology Division, Department of Health Surveillance and <https://www.paho.org/en/topics/coronavirus-infections/coronavirus-disease-covid-19>.

- 1.19 Despite these advances, the use of clinical data for making decisions regarding patient care, health institution management, and the MSP's leadership role is still at an early stage.
- 1.20 **The overall problem** to be addressed is the limited quality of health services in relation to the diagnosis and treatment of patients with CNCs, particularly hypertension. Estimates indicate that only 39.3% of hypertensive patients ages 15 to 64 receive treatment.<sup>15</sup> This means that 363,180 hypertensive persons are not being treated.
- 1.21 The overall problem consists of two specific problems. The first is the poor quality of interoperable data in the HCEN, reflected by the fact that the data available to health care providers on the HCEN platform is in formats that do not allow for automated data processing or for the possibility of conducting an aggregate analysis of the population.
- 1.22 The second specific problem is the limited use of clinical data, both by providers for patient management and by the MSP for monitoring and tracking health goals and delivery-of-care targets.
- 1.23 **The first specific problem**, associated with data fragmentation and storage methods, affects both the quality of direct patient care and the quality and timeliness of the setting and monitoring of healthcare delivery targets by the lead agency for the health sector. Direct health care is affected because medical personnel cannot quickly access the relevant patient history to thereby efficiently diagnose the condition and determine the appropriate treatment.<sup>16</sup> Meanwhile, efforts to set and track targets are hindered by a lack of real-time data on the prevalence of certain illnesses and the care provided to address them.
- 1.24 This specific problem manifests itself in various ways, including the following: (i) there is no patient medical summary feature with structured data accessible through the HCEN platform; and (ii) no clinical events recorded on the HCEN platform include an associated minimum data set (MDS).

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<sup>15</sup> Source: Second National Survey on Risk Factors for Noncommunicable Diseases, MSP, 2013.

<sup>16</sup> This is especially the case in urgent and emergency care facilities, where the time it takes to make treatment decisions is key and where information on a patient's allergies, diseases, and prior tests can be a determining factor in choosing the most appropriate course of action.

- 1.25 At present, a clinical event reported in the HCEN consists of a small structured data set describing the event<sup>17</sup> plus a reference to a location in the acting provider's systems, where more details on the event can be found. Unfortunately, these additional details consist mostly of unstructured data and therefore cannot be processed using an automated mechanism.<sup>18</sup> On the contrary, these data have to be read and interpreted by a person to be understood. Because of this, while the HCEN is useful in supporting the direct care of patients by health professionals and technicians, the support it provides is not optimal given the time required to individually review each of the documents associated with the patient being treated. Furthermore, because of these characteristics, the HCEN platform is not equipped for aggregate data analysis, which could generate epidemiological and healthcare statistics to support the MSP's leadership of the sector.
- 1.26 In view of the foregoing, the drivers of the first specific problem could be broken down as follows: (i) in its current configuration,<sup>19</sup> the HCEN has limited capacity to store and manage large data volumes,<sup>20</sup> and the clinical events recorded on the platform allow access to a very limited amount of structured patient data; (ii) the HCEN platform is still not ready to record, process, and consolidate information on medications prescribed and dispensed to patients;<sup>21</sup> (iii) there is a lack of catalogs to codify new data fields for inclusion in the MDS;<sup>22</sup> (iv) many physicians and health technicians lack the knowledge and skills to codify or classify the condition of the patients receiving care at the time the clinical events are recorded in a given provider's health records management system;<sup>23</sup> and (v) any computer platform containing large amounts of data on a population is susceptible to cyberattacks.<sup>24</sup>

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<sup>17</sup> The description includes the facility or specialized area where care was provided, type of event (outpatient, emergency, paraclinical tests), patient name, the acting physician or technician, and relevant provider. It does not include any specific diagnosis or treatment or any other patient data.

<sup>18</sup> The documents are available in clinical document architecture (CDA) format, which can accommodate both structured and unstructured data. However, the documents associated with clinical events recorded in the HCEN are still mostly comprised of unstructured data.

<sup>19</sup> Defined and developed during the implementation of the first individual operation under the CCLIP.

<sup>20</sup> This is the case despite the strides made with the support of operations 3007/OC-UR and 4300/OC-UR. In particular, the HCEN platform would not be able to support the increase in volume that would occur if every clinical event were to be uploaded together with an associated MDS.

<sup>21</sup> This means that data on the prescription and dispensing of medications entered in the health records management systems of the various providers cannot be reported in timely fashion to other entities, particularly the MSP.

<sup>22</sup> As of 2019, there were six catalogs: (i) the master patient index (MPI); (ii) document ontology (health events and services); (iii) health care specialties; (iv) medications; (v) healthcare delivery; and (vi) diseases that must be reported to the MSP. These catalogs are sufficient for recording the clinical event on the HCEN platform but not enough to allow for automated consultations of medical data across institutions.

<sup>23</sup> Assistance services for health professionals and technicians were contracted through the first two operations under the CCLIP to help with diagnostic terminology in the medical records. In view of the extensive experience of the Hospital Italiano de Buenos Aires (HIBA) in this area, its assistance services were used for this purpose. While in-country capacity in this regard has expanded, additional work is needed before this service can be provided with quality and efficiency by Uruguay's own health system.

<sup>24</sup> Though Uruguay has undertaken several initiatives to protect its cyberspace and ranks as one of the most advanced countries in Latin America and the Caribbean in this area, the country as a whole is still somewhat below the midpoint score in the maturity model presented in the 2016 Cybersecurity Report "Cybersecurity: Are We Ready in Latin America and the Caribbean?" (IDB/OAS, 2016), where it scored 149 points out of 245.

- 1.27 **The second specific problem** is the limited use of clinical data, both by providers for patient management and by the lead agency (MSP) for monitoring and tracking health goals and delivery-of-care targets. While health professionals and administrators can access and use information for decision-making purposes, much of the data remains isolated in patient medical records and is not used for either healthcare or management purposes. The fact that the MSP does not use data from the HCEN platform to monitor any of its health objectives is empirical evidence of this second problem. This gives rise to various effects that influence the effectiveness and efficiency of the health system. For example, it: (i) makes a mismatch between supply and demand of health services more likely to occur; (ii) makes it difficult for providers to optimize the daily allocation of human resources; and (iii) makes it difficult to conduct the epidemiological and healthcare analyses needed to enable the lead agency to set health objectives and healthcare delivery goals for subsequent periods.<sup>25</sup>
- 1.28 The drivers of this problem include the following: (i) a low number of events for which an MDS has been agreed-upon and approved for inclusion in the respective medical event records in the service providers' electronic files;<sup>26</sup> (ii) technical and financial constraints impeding providers from joining the HCEN platform;<sup>27</sup> (iii) security risks for healthcare providers when participating in a massive data network in which a large number of institutions interact;<sup>28</sup> (iv) the HCEN platform does not yet support the generation of chain-of-events data at the individual user level in order to enable population characterization and monitoring actions and patient monitoring actions, or of aggregate data at the sector level to enable monitoring of the sector's delivery-of-care performance by the lead agency (MSP); (v) there are no tools for conducting cost comparisons between alternative approaches for diseases or similar conditions and for helping to define protocols based on a cost-effectiveness analysis; and (vi) there are constraints on the MSP's ability to maintain and further develop the platform and conduct data analytics based on the data inputs the HCEN can provide in the short term.<sup>29</sup>

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<sup>25</sup> It is worth noting that measurements or estimates of the magnitude of these effects of the current problem could not be obtained.

<sup>26</sup> As of year-end 2019, the contents of four MDSs had been agreed upon, approved, and disseminated: (i) non-emergency visit; (ii) centralized emergency visit; (iii) out-patient urgent care visit; and (iv) hospital discharge. Efforts are underway to develop at least seven additional MDSs that are considered necessary: (i) laboratory report; (ii) non-urgent clinical oncology visit; (iii) non-urgent pediatric care visit; (iv) imaging report; (v) endoscopy report; (vi) anatomic pathology and ancillary testing report; and (vii) echocardiogram report.

<sup>27</sup> In tandem with the actions undertaken by the Salud.uy Program, the health care providers overhauled their information systems. During implementation of the first operation under this CCLIP, providers received financial support in the form of an "excess capitation payment for investment," by means of which providers had an opportunity to give priority to investments in information systems and finance them through a temporary increase in the capitation payments collected from the National Health Service. At present, this mechanism is no longer in place, so health care providers have to fund investments in their information systems from their routine revenue, since extra assistance is not available.

<sup>28</sup> According to the study "Impacto en la Organización y las TI de los Prestadores de Servicios de Salud" (AGESIC, 2018), 77% of the service providers in the health sector still do not have a formally appointed data security officer on their staff, while 45% lack a security policy approved by senior management, 42% are not familiar with the cybersecurity framework developed by AGESIC for healthcare institutions, and 40% lack a formal plan for service continuity in the event of an information system failure. Close to 70% of these institutions do not formulate or approve annual objectives in the area of data security.

<sup>29</sup> Including both human resources and available technical tools.

- 1.29 **Outstanding challenges.** The challenges faced by the health sector and digital health in the medium term include: (i) improving decision-making capacity by introducing central cognitive algorithm services; (ii) facilitating the adoption of wearable medical devices<sup>30</sup> through a connectivity platform based on the Institute of Electrical and Electronics Engineers standard; and (iii) improving health system coordination through a platform for managing service supply and demand and by introducing the concept of interoperable organizational processes in the HCEN.
- 1.30 **Bank experience in the country and the region.** In terms of experience, the Bank has supported several projects in Uruguay in the area of quality and efficiency management in the health sector. Examples include the development and implementation of an EHR-based system for managing emergency services in public and private hospitals in Uruguay, financed through technical cooperation operations: Productivity and Management Improvements in the Uruguayan Healthcare System (operation ATN/ME-10681-UR) and Electronic Health Records in Public Hospitals in Uruguay (operation ATN/JF-13956-UR). In the region, the Bank supported the Dominican Republic in implementing a health services management system, including a subsystem of referrals and counter-referrals (project 2623/OC-DR).
- 1.31 **Lessons learned.** The lessons learned from the execution of the first two operations under the CCLIP include the following: (i) engaging the interest of service providers and other health sector entities and their voluntary participation in project consultation forums is key to ensuring acceptance and adoption of products and activities by sector entities and even their collaboration in the design of those products and activities. In this regard, this project includes various change management, communication, and knowledge transfer activities, which amount to 8% of the budget; (ii) service providers are at different stages of data management maturity, affecting their relative capacity to adopt and join the integrated system. In this regard, this project includes a specific activity aimed at strengthening the data management capacity of the more technologically challenged providers; (iii) help desk support for service providers and the public is essential for the adoption of new tools as they are created. In this regard, during the new operation, the executing agency will continue and expand the help desk service put in place for the previous operations under the CCLIP; and (iv) the development of new features and the progress made in adopting existing ones may require periodic review and expansion of the stakeholders' registry and its management. In this regard, during the execution of this project, the stakeholders' registry and its management will continue to be regularly updated, potentially adding new key actors to the advisory council for the Salud.uy Program.<sup>31</sup>
- 1.32 **Complementarity with other Bank operations.** This project complements the following operations: (i) loans 3007/OC-UR and 4300/OC-UR, e-Government Management Project in the Health Sector I and II; (ii) loan 3625/OC-UR, Program for Improvement of Public Services and State-citizen Interaction;

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<sup>30</sup> Wearable medical devices are incorporated into the patient's clothing to monitor vital signs. They are interconnected with an information system and can also intervene on the body to which they are attached.

<sup>31</sup> During execution of the first two operations under the CCLIP, advisory council (see paragraph 3.5) membership was expanded from its original makeup to include the following institutions: the Medical Association of Uruguay (SMU), the national medical trade union, the Nursing School at the Universidad de la República, and user associations represented in JUNASA.

(iii) loan 4867/OC-UR, Program to Support the Digital Government Strategy; and (iv) loan 4843/OC-UR, Strengthening Cybersecurity in Uruguay.<sup>32</sup> These operations launched the HCEN platform, fostered greater use of digitized procedures by agencies and among the public, and put in place advanced tools to protect the country's digital environment, including public as well as private entities. A significant objective is to protect the cyberspace of digitized procedures and public agencies' computer systems and databases. This should help instill trust among the public in the use of digital options for conducting personal or business formalities, with special protections against identity theft, which is one of the main concerns of users and agencies. This project also complements loan 5034/OC-UR, Strengthening Public Policy and Fiscal Management to Address the Health and Economic Crisis Caused by COVID-19 in Uruguay, and loan 5105/OC-UR, Emergency Support for Vulnerable Populations Affected by Coronavirus, in that it helps reinforce the response to the health emergency and its economic and social repercussions. Lastly, this project will be complemented by loan 4943/OC-UR, Program to Strengthen the Management of the Government Health Services Administration (ASSE), inasmuch as the financial data obtained through the systems financed, coupled with the data from the physical output extractable from the health records management systems, will improve the quality of service cost analyses and help set more realistic and timely operating and cost targets for ASSE services. Technical and operational coordination for four of these five programs is ensured by AGESIC's leadership role in its implementation. In the case of loan 4943/OC-UR, executed by ASSE, coordination is ensured by AGESIC's participation in the steering and technical committees for that operation.

- 1.33 **Strategic alignment.** The project is consistent with the second Update to the Institutional Strategy (document AB-3190-2) and is strategically aligned with the productivity and innovation challenge, inasmuch as the HCEN is an innovative tool that will help boost productivity, both overall and in the health sector in particular; and with the crosscutting theme of institutional capacity and the rule of law, inasmuch as various project outputs address the implementation of management and information systems for government agencies, which helps enhance the quality, timeliness, and accessibility of an essential public service such as health, and inasmuch as the availability of data made possible by the platform can bring secondary benefits in terms of transparency and integrity. It is also aligned with the priority area of technology and innovation, inasmuch as it improves access to government services by means of digital solutions. In addition, the project will contribute to the Corporate Results Framework (CRF) 2020-2023 (document GN-2727-12), since it helps increase the number of "government agencies with strengthened digital technology and managerial capacity" to improve the delivery of public services. The strengthening of government agencies will be verified in terms of the benefits that flow to the MSP, the AGESIC, and public health care providers (the ASSE, Hospital Policial, and Hospital Militar) by virtue of project outputs such as "hospitals that incorporate application of oncological EHR and imaging developed with the first loan" and "system in operation for prescription, administration and control of medications." It is also consistent with the Health and Nutrition Sector Framework Document (document GN-2735-7) in its dimension of

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<sup>32</sup> With the exception of operation 3007/OC-UR, which has already been completed, these operations are currently in execution by AGESIC.

success 2, “All have timely and continuous access to high-quality health services and nutrition,” and dimension of success 4, “Sector governance calls for efficiency and leadership by the health authorities, and promotes intersectoral coordination for results.” It is also consistent with the Innovation, Science, and Technology Sector Framework Document (document GN-2791-8) in its dimension of success 1, “Investment in innovation, science and technology, both public and private, grows so as to reduce the innovation shortage typical of Latin American and Caribbean economies.” In addition, it is aligned with the Sector Strategy Institutions for Growth and Social Welfare (document GN-2587-2), which gives priority to strengthening: (i) public sector management for the delivery of services that will meet the demands of citizens, and (ii) e-government to improve competitiveness and social integration. Moreover, this operation is aligned with the Country Strategy with Uruguay 2016-2020 (document GN-2836), in its strategic objective of “improv[ing] the first level of health care” by making patients’ health records available to all health centers in the country. Lastly, this operation is included in the Update of the Annex III of the 2020 Operational Program Report (document GN-2991-3).

## **B. Objectives, components, and cost**

- 1.34 **Project objective.** The project will help improve the overall management of health services, including services related to the prevention and early care of chronic noncommunicable diseases. To achieve this improvement, the project will pursue the following specific objectives: (i) enhance the quality of the interoperable information in the National Electronic Health Record System (HCEN); and (ii) expand the use of HCEN data for patient management and for the monitoring of health objectives and delivery-of-care goals. The project will comprise two components:
- 1.35 **Component 1. Platform and related services (IDB: US\$3,024,346; local counterpart: US\$665,356).** The objective of this component is to provide the foundation to increase the structured data entered in the HCEN platform and expand the platform’s features. Accordingly, the component will finance: (i) an update of the HCEN platform; (ii) development and implementation of a country-wide system for managing the prescription and dispensing of medications; (iii) design of a system of structured medical data catalogs; (iv) implementation of SNOMED terminology services;<sup>33</sup> and (v) implementation of a cybersecurity model for the HCEN platform.
- 1.36 **Component 2. Promotion of data use (IDB: US\$2,708,441; local counterpart: US\$595,857).** The objective of this component is to expand the use of HCEN clinical data to support the direct delivery of health care by service providers, decision-making regarding how service providers allocate human and material resources, and the setting and monitoring of health objectives and delivery-of-care goals by the health sector’s lead agency. Accordingly, the component will finance: (i) development and deployment of a strategy to promote and adopt MDS in the HCEN; (ii) implementation of digital strengthening projects at health service

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<sup>33</sup> Systematized Nomenclature of Medicine (SNOMED) is the most comprehensive codified clinical terminology developed to date anywhere in the world.



providers and other activities to strengthen the digital health ecosystem;<sup>34</sup> (iii) implementation of a strategy to promote and adopt a cybersecurity reference framework for use of the MDS in the HCEN;<sup>35</sup> (iv) design and implementation of a population tracking system based on HCEN data;<sup>36</sup> (v) design and implementation of a pilot system for reporting data on cost-effectiveness in the health sector; and (vi) implementation of a knowledge transfer<sup>37</sup> strategy.

1.37 **Project coordination and management (IDB: US\$267,213; local counterpart: US\$88,787).** Identified coordination, audit, monitoring, and evaluation costs are estimated at US\$356,000, equivalent to 4.8% of the total cost of the project.

1.38 **Main beneficiaries.** The final beneficiaries will be: (i) the public, especially individuals with CNCDS, who will receive better-quality healthcare services; (ii) health sector professionals, technicians, and administrators, who will have access to more sophisticated tools for conducting their daily healthcare activities; (iii) the directors and managers of healthcare providers, who will have access to detailed data in a timely manner for decision-making on allocating human, material, and financial resources; and (iv) the lead agencies (the MSP and MEF), which will have access to real-time aggregate data on the performance of the health sector and will thus be able to better perform their sector leadership and oversight roles. In addition, the availability of timely, detailed, and quality clinical data will make it possible to mainstream gender in policy design, benefiting the public as well as government agencies.

## C. Key results indicators

1.39 **Expected impacts and outcomes.** The main impact of the operation will be an improvement in preventive care for the population with CNCDS, evidenced by the percentage of all hypertensive persons who are under treatment. This impact will be a consequence of the following outcomes, among others: (i) increase in the number of persons who have a medical summary on the HCEN platform; (ii) increase in the number of persons who have an MDS; (iii) increase in the number of clinical events that have been entered in the HCEN with an MDS; (iv) increase in health staff satisfaction with the HCEN platform; and (v) increase in the number of health objectives and delivery-of-care targets monitored through the HCEN's population tracking system.<sup>38</sup>

1.40 **Economic evaluation.** The project is expected to yield a reasonable economic return, with a net present value of US\$5.7 million, an internal rate of return of 72%, and a benefit-cost ratio of 1.87. The estimated benefits are based on a reduction

<sup>34</sup> Activities intended to reinforce their adoption by the medical communities will include awareness-raising seminars and workshops as well as training courses on the new tools arising from the project.

<sup>35</sup> It is worth noting that personal health data are protected by regulations already in effect for healthcare providers, who are the custodians of this information. Specifically, [Law 18,331 on Personal Data Protection](#) classifies health data as sensitive, establishes tight restrictions on their collection and use, and requires ensuring that medical information remains secure, while [Law 19,286 \(Code of Medical Ethics\)](#) establishes a confidentiality obligation and provides the relevant regulations.

<sup>36</sup> The population tracking system aims to provide systematized data on preventive and healthcare actions performed on individuals with various epidemiological profiles. Among other benefits, this will make it possible to quantify whether patients and providers are adhering to prevention and healthcare protocols and analyze the effectiveness of those protocols.

<sup>37</sup> From AGESIC to the MSP.

<sup>38</sup> For more details, see the Results Matrix (Annex II).

in healthcare costs associated with hypertension complications such as cerebrovascular accidents and kidney dialysis treatments. Under an adverse scenario in which the project has very little impact on the rate of care and monitoring of hypertensive patients, the net present value would be US\$0.9 million, with an internal rate of return of 21% and a benefit-cost ratio of 1.14.<sup>39</sup>

## **II. FINANCING STRUCTURE AND MAIN RISKS**

### **A. Financing instruments**

- 2.1 The third individual operation under this CCLIP has a total cost of US\$7,350,000, of which US\$6,000,000 will be financed with the Bank's Ordinary Capital resources and US\$1,350,000 with the local contribution. Figuring in the first two individual operations under this CCLIP, the third operation, which is structured as a specific investment loan, completes 100% of the US\$18-million financing envisaged under CCLIP UR-X1009.
- 2.2 The expenditure categories to be covered by the project include the procurement of goods, nonconsulting services, and consulting services. The finance charges and current expenditures generated by the project will be covered with funds from the National Treasury. All costs associated with the project, including applicable taxes on procurement, will be eligible for financing from the loan proceeds.
- 2.3 The execution and disbursement period is estimated at three years, which is consistent with the programming of the planned activities. The average pace of disbursement is estimated at US\$2 million per year. This is consistent with the performance of the two previous operations under the CCLIP, which had similar financing terms and amounts.<sup>40</sup> Although fiscal restrictions are expected as a result of the crisis caused by the COVID-19 pandemic, such restrictions should not impact the expected terms, because this operation contributes to the response to the public health emergency and therefore has been given priority. The estimated costs by component and annual disbursement schedule are shown in Tables 4 and 5 below and in the [multiyear execution plan](#).

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<sup>39</sup> For more details, see the [economic analysis](#) of the project.

<sup>40</sup> Worth noting in this regard is AGESIC's highly satisfactory track record as executing agency of Bank-financed operations.

**Table 4. Estimated project costs (US\$ million)<sup>41</sup>**

<b>Components and activities</b>	<b>IDB</b>	<b>Local</b>	<b>Total</b>	<b>%</b>
<b>Component 1. Platform and associated services</b>	<b>3.02</b>	<b>0.67</b>	<b>3.69</b>	<b>50</b>
Activity (i): HCEN platform updates	1.33	0.29	1.62	
Activity (ii): System for prescribing and dispensing medications	0.83	0.19	1.02	
Activities (iii), (iv), and (v): Structured medical data catalogs, SNOMED terminology services, and cybersecurity model	0.86	0.19	1.05	
<b>Component 2. Promotion of data use</b>	<b>2.71</b>	<b>0.59</b>	<b>3.30</b>	<b>45</b>
Activities (i) and (iii): Strategy to promote and adopt MDS and associated cybersecurity framework	0.22	0.05	0.27	
Activity (ii): Digital strengthening for health service providers and the health ecosystem	0.61	0.13	0.74	
Activity (iv): Population tracking system based on patient summaries and clinical events	1.40	0.31	1.71	
Activities (v) and (vi): Pilot system for reporting data on cost-effectiveness in the health sector and knowledge transfer strategy	0.48	0.10	0.58	
<b>Management, monitoring, and evaluation</b>	<b>0.27</b>	<b>0.09</b>	<b>0.36</b>	<b>5</b>
<b>Total</b>	<b>6.00</b>	<b>1.35</b>	<b>7.35</b>	<b>100</b>

**Table 5. Annual flow of disbursements (US\$ million)**

<b>Source</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>TOTAL</b>
<b>IDB</b>	1.85	2.00	2.15	6.0
<b>Local counterpart</b>	0.42	0.45	0.48	1.35
<b>Total</b>	2.27	2.45	2.63	7.35
<b>%</b>	<b>31</b>	<b>33</b>	<b>36</b>	<b>100</b>

- 2.4 **Fulfillment of eligibility conditions under the CCLIP (UR-X1009).** This project is the third individual loan operation under the CCLIP (UR-X1009) approved by the Board of Executive Directors pursuant to Resolution DE-123/13. The project meets the eligibility criteria set forth in the applicable policy (document GN-2246-9)<sup>42</sup> for individual loan operations, inasmuch as: (i) the project falls under the sectors and components defined under the CCLIP; (ii) the project objectives are consistent with the Bank's strategy with the country and are included in the Update of the Annex III of the 2020 Operational Program Report (document GN-2991-3); (iii) the executing agency, AGESIC, will be retained; (iv) the results obtained by AGESIC in the first two individual operations are satisfactory, as reflected in the output and outcome indicators reported in the Bank's progress monitoring reports as well as in paragraphs 1.14 through 1.16 above, and, accordingly, the project team and the national authorities can expect the proposed new project to perform satisfactorily; (v) as regards financial execution of the second individual operation (loan 4300/OC-UR), the Bank has disbursed 80% of the funds under that loan; (vi) the borrower and the executing agency have complied with the contractual conditions in the loan contract and with the Bank's disbursement and procurement

<sup>41</sup> The costs set out in this table are indicative.

<sup>42</sup> This operation has been prepared in accordance with the eligibility criteria established in document GN-2246-9, as provided in paragraph 3.12 of document GN-2246-13.

policies, including audited financial statements; and (vii) as agreed by the parties in the CCLIP agreement, the borrower has committed itself to a local contribution in excess of the 14% minimum stipulated in the agreement.<sup>43</sup>

**B. Environmental and social risks**

- 2.5 In accordance with the Bank's Environment and Safeguards Compliance Policy (Operational Policy OP-703), this project has been classified as a Category "C" operation. The project will not finance any physical infrastructure component, so no environmental or social risks are anticipated.

**C. Other key issues and risks**

- 2.6 Two medium-level development risks were identified, related to: (i) the limited supply of staff specialized in informatics and medical records available to work at the MSP, AGESIC, healthcare providers, and service providers. To mitigate this risk, workshops and seminars will be conducted for informatics students, teachers, and professionals with a view to generating interest in medical informatics (paragraph 1.36.ii); and (ii) potential computer security incidents that could affect system reliability and the security of personal data. To mitigate this risk, a cybersecurity model will be implemented for the HCEN platform (paragraph 1.35.v), and a strategy for the promotion of the cybersecurity reference framework for use of an MDS in the HCEN and its adoption by healthcare providers will be implemented in coordination with loan 4843/OC-UR, Strengthening Cybersecurity in Uruguay (paragraph 1.36.iii).
- 2.7 In addition, a medium-level fiscal sustainability risk was identified in relation to the low economic growth rates and the rise in the fiscal deficit in recent years, a situation that has been exacerbated by the COVID-19 pandemic. This could result in greater fiscal restrictions and shift government priorities away from the project. To mitigate this risk, AGESIC authorities will conduct a direct dialogue with key political stakeholders to raise awareness of how this investment benefits health services management in general and the health response to the pandemic in particular.
- 2.8 **Sustainability.** The HCEN platform will be kept operational through AGESIC financing until the conclusion of the loan. Once the project is completed, as coordinated with the authorities and under an existing agreement between AGESIC and the MSP, responsibility for the technical and evolutionary maintenance and operation of the systems obtained by the project will gradually be transferred to the MSP, including data security and personal data protection.<sup>44</sup> This will be funded with the MSP's budgetary resources, thereby ensuring their sustainability.
- 2.9 **Use of the system.** Public and private healthcare providers are required to put the systems and platforms made available under the project to correct use, as established in Decree 242 and MSP Ordinance 1085 of 2017. Specifically, providers are required to upload user and clinical event data to the HCEN platform pursuant to a schedule established for each type of provider. These rules and regulations have been supplemented by Decree 122 of 2019, which requires

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<sup>43</sup> See Section 5 of the agreement.

<sup>44</sup> The Cybersecurity Policy distributes responsibilities among all government agencies under coordination by AGESIC. The responsibilities to be transferred are those assigned to the MSP.

providers to maintain the traceability of every access to the HCEN platform and to attach an MDS, which it describes, to all medical documents. These high-level standards constitute sound legal support for the HCEN platform and help to ensure correct use of the platform by the various entities in the sector.

### III. IMPLEMENTATION AND MANAGEMENT PLAN

#### A. Summary of implementation arrangements

- 3.1 **Borrower and executing agency.** The borrower will be the Eastern Republic of Uruguay, and the executing agency will be the borrower, acting through AGESIC.<sup>45</sup> AGESIC will be able to rely on collaboration with other institutions pursuant to the “Agreement on Technical and Interagency Cooperation for Development of the Salud.uy Program” it signed on 4 October 2012 with the MSP and the MEF.<sup>46</sup> That agreement, which has successfully governed the execution of the first two loan operations under the CCLIP, will remain in effect and be modified as needed. A long-term objective set out in that plan is to “improve the public’s access to quality health services throughout the country.” To achieve this, it proposes to generate “conditions that would allow healthcare providers to offer their services in a comprehensive, complementary, and user-focused manner” as an interim result.
- 3.2 In addition, the agreement establishes a steering committee, consisting of representatives from the MSP, MEF, the Office of the President of the Republic, JUNASA, and AGESIC. The steering committee is responsible for adopting key strategic and operating decisions, coordinating with the project coordinator for their execution.
- 3.3 AGESIC will be responsible for project execution, including: (i) serving as the contact point with the Bank; (ii) submitting disbursement requests; (iii) handling the project’s contracting and procurement cycle; (iv) reporting on the use of proceeds; (v) submitting annual work plans, disbursement forecasts, procurement plans, and status reports; and (vi) preparing terms and conditions, authorizations, licenses, agreements, model contracts, and other instruments needed for connecting to and sharing information through the HCEN system, as well as for other products financed.
- 3.4 AGESIC will reactivate the project coordination unit (PCU), which operated satisfactorily during the execution of the first two operations under the CCLIP. The PCU, led by the project coordinator, will have support from the following AGESIC offices: (i) the Strategic Management Division, for annual and multiyear fiscal planning, budgetary and financial planning, monitoring of outputs and activities, and preparation of status reports; (ii) the Procurement Division, to manage the procurement processes for goods, nonconsulting services, and consulting services provided by firms; (iii) the Human Management Division, for contracting individual consultants and managing their contracts; (iv) the Accounting and Finance Division, for bookkeeping, preparation of financial statements, management of

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<sup>45</sup> The program is aligned with the existing legal mandate and administrative and operational structure of AGESIC. AGESIC was created by Law 17930 of 19 December 2005 (Articles 72-73). AGESIC is currently a deconcentrated agency of the Office of the President of the Republic (Law 18046 of 17 October 2006, Article 54). The rules and regulations governing AGESIC can be consulted [here](#).

<sup>46</sup> See the [Agreement](#).

supplier payments, and preparation of expenditure support documents to be sent to the Bank; and (v) the General Secretariat and Legal Division, to support the management of bidding processes and advise on the drafting of contracts and bidding documents.

- 3.5 **Strategic coordination.** With a view to fostering broad participation and acceptance by public and private institutional actors, the governance structure includes a Salud.uy Program advisory council, which has been in place since the first operation under the CCLIP and is tasked with facilitating advice and participation by all key actors in the sector. All stakeholders may voice their concerns and contribute their specialized knowledge to this body. The advisory council holds monthly meetings and is comprised of representatives from the ASSE, the National Resources Fund, the Social Security Bank, the National Telecommunications Administration, the College of Medicine, the College of Nursing, the College of Engineering, Hospital de Clínicas, the Federation of Health Providers of the Interior, the Chamber of Health Institutions and Businesses, the Chamber of Emergency Services, the Uruguayan Mutual Aid Union, the Uruguayan Medical Union, the Association of Doctors, the PIT-CNT, the movement of health system users, and the Pan-American Health Organization.
- 3.6 **Special contractual condition precedent to the first disbursement of the loan proceeds. The borrower, either directly or through the executing agency, will provide evidence to the Bank of the appointment of a project coordinator.** This role is key for programming and implementation of the operation, as described in paragraphs 3.2 and 3.5.
- 3.7 **Single-source selection.** Single-source selection is expected to be used to contract consulting services from Hospital Italiano de Buenos Aires (HIBA) for a total amount of US\$159,718, covered by the provisions for continuation of previous work and exceptional worth for the assignment set out in sections 3.11(a) and 3.11(d) of the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-15).<sup>47</sup> In addition, due to the need to maintain continuity of the technical approach during project execution and capitalize on experience and knowledge of the Banks' policies and procedures, the procurement plan anticipates the rehiring of eight individual consultants for a total amount of US\$805,201 for the operation's full execution period. These consultants, who were previously hired through competitive processes with resources from loan 4300/OC-UR, have specialized knowledge and experience,<sup>48</sup> making it advisable to include them in the project. The renewal of their contracts is evaluated annually by AGESIC on the basis of performance and results.

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<sup>47</sup> The consulting services to be financed through this mechanism must be eligible for Bank financing under the Bank's expenditure eligibility policy. Eligible Expenditures in Investment Loans (Operational Policy OP-311).

<sup>48</sup> The individual consultants who would be rehired on the basis of continuity of service with respect to the second operation under the CCLIP are associated with the following roles and responsibilities within the PCU: (i) coordination of the HCEN platform; (ii) terminology expertise; (iii) expertise in vertical assets and digital strengthening of organizations; (iv) change management; and (v) institutional coordination and communications. It is worth noting that the individual consultants to be rehired have relevant prior knowledge acquired in the context of the second operation under the CCLIP.

- 3.8 The project envisages the contracting of consulting and nonconsulting services through support from the United Nations Office for Project Services (UNOPS), the United Nations Development Programme (UNDP), or the Julio Ricaldoni Foundation, pursuant to agreements with AGESIC currently in force, which will be sent to the Bank prior to any contracting under the relevant agreement.<sup>49</sup>
- 3.9 **Disbursements.** Disbursements will be made mainly in the form of advances of funds based on actual liquidity needs. These advances will preferably be made every six months, after supporting documentation has been submitted for at least 70%<sup>50</sup> of the previous advance. The expenditure justification form and financial planning spreadsheet are required to be submitted as documentation. These documents will be reviewed ex post.
- 3.10 **Audits.** During execution, the executing agency will submit the project's audited annual financial statements to the Bank in accordance with the Financial Management Guidelines for IDB-financed Projects (document OP-273-12) no later than 30 April of each year. The audited financial statements for the close of the project will be submitted within 120 days following the end of the original disbursement period or any extension thereto. These financial statements may be audited by the Office of the Auditor General or by an audit firm acceptable to the Bank.

## **B. Summary of arrangements for results monitoring**

- 3.11 **Monitoring.** The executing agency will be responsible for updating the [multiyear execution plan](#), [annual work plan](#), and [procurement plan](#), as well as for preparing the semiannual status reports and submitting them to the Bank. The Bank will be responsible for preparing and publishing the project monitoring reports and preparing the project completion report. Any adjustment to the results matrix or the risk matrix will be discussed and agreed upon between the Bank and the executing agency before it is formalized in either a project monitoring report or the project completion report. For tasks related to project monitoring and evaluation, the executing agency will have an analyst specialized in management control and monitoring, as well as other consultants and AGESIC staff members assigned to the project part-time. The Bank will conduct supervisory missions and inspection visits, and will hold at least one joint monitoring meeting each year with the executing agency to discuss such issues as: (i) progress on the activities identified in the annual work plan; (ii) the degree of achievement of the indicators set out in the results matrix; (iii) the annual work plan for the following year; and (iv) the procurement plan for the following 18 months and any potential modifications to budgetary allocations by component.

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<sup>49</sup> Contracting will be carried out in accordance with the Bank's policies and procedures (document GN-2350-15). Accordingly, it is incumbent upon ASEGIC to ask the Bank to provide the relevant no objections for each contracting process.

<sup>50</sup> Under the Financial Management Guidelines for IDB-financed Projects (document OP-273-12), the use of this percentage is justified by the fact that central administration entities such as AGESIC are required to have financing in place in Central Bank accounts before committing new obligations. In addition, the processing of payments requires the pre-emptive intervention of the Office of the Auditor General and the Office of the Comptroller General.



- 3.12 **Evaluation.** The executing agency will submit a midterm evaluation report to the Bank, which will discuss the progress made in the delivery of outputs and outcomes, a review of the risks, and identification of lessons learned to be incorporated with a view to improving execution. In addition, the executing agency will submit a final evaluation, primarily aimed at verifying progress with regard to the outcomes established in the results matrix as well as other elements described in the [monitoring and evaluation plan](#).<sup>51</sup> This final evaluation will serve as an input for preparing the project completion report.
- 3.13 **Impact evaluation.** A quasi-experimental impact evaluation will be conducted using the regression discontinuity method to measure the effectiveness of a patient management pilot project based on data from the HCEN platform, aimed at reducing the risk level of the population with one or more significant CNCDs in Uruguay (hypertension and/or diabetes). The results evaluation will be implemented in coordination with AGESIC (see [monitoring and evaluation plan](#)). The percentage of hypertensive persons who are diagnosed and treated will be measured as part of the evaluation.

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<sup>51</sup> The midterm evaluation will be conducted once 50% of the loan proceeds have been committed or after two years of project execution, whichever occurs first. Preparation of the final evaluation will begin when at least 90% of the loan proceeds have been committed.



Development Effectiveness Matrix		
Summary		UR-L1163
I. Corporate and Country Priorities		
1. IDB Development Objectives		
Development Challenges & Cross-cutting Themes	-Productivity and Innovation -Institutional Capacity and the Rule of Law	
Country Development Results Indicators	-Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery (#)*	
2. Country Development Objectives		
Country Strategy Results Matrix	GN-2836	To improve the first level of health care
Country Program Results Matrix	GN-2991-3	The intervention is included in the 2020 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution		9.4
3.1 Program Diagnosis		2.4
3.2 Proposed Interventions or Solutions		4.0
3.3 Results Matrix Quality		3.0
4. Ex ante Economic Analysis		9.0
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		3.0
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		0.0
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
5. Monitoring and Evaluation		8.9
5.1 Monitoring Mechanisms		2.5
5.2 Evaluation Plan		6.4
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		Medium
Identified risks have been rated for magnitude and likelihood		Yes
Mitigation measures have been identified for major risks		Yes
Mitigation measures have indicators for tracking their implementation		Yes
Environmental & social risk classification		C
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting.  Procurement: Information System, Price Comparison.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		

Note: (\*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

#### Evaluability Note

The main goal of the operation is to improve the management of health services in general, including those related to the prevention and early care of chronic non-communicable diseases. The first area proposes a technological investment for improving the quality of the interoperable information of the National Electronic Medical Record (HCEN). The second area is focused on an increase of the use of HCEN data for patient management and monitoring of health goals and care goals.

The project proposal diagnosis describes that Uruguay is experiencing a significant demographic change. It has a low birth rate (1.98 births per woman), and 14.8% of the population is over 64 years (INE,2020). This population aging phenomenon has had consequences on the prevalence of NDCs and public expenditure in health. Currently, 29.9% of Uruguayan people suffer hypertension, 6% diabetes (MSP,2020); and government health expenditure was equivalent to 9.5% of GDP in 2018. Second, HCEN has the highest adoption rate of a digital health records system in Latin America. In 2019, 91% of the population was enrolled in the system (AGESIC,2020); universal coverage is expected in 2020. The solutions are aligned to the problems. There is no evidence on effectiveness for some proposed solutions in the country.

The economic analysis provides a quantification of some economic benefits. It quantifies benefits associated with a reduction of morbidity rates of non-transmissible chronic diseases, which include illnesses such as hypertension and diabetes. The assumptions on the magnitude of the expected benefits are based on the public health national targets. The costs include maintenance and investments associated with the loan. The analysis concludes the Project has a net present value of US\$5.7 million.

The Project presents a robust monitoring and evaluation plan, it considers an impact evaluation with a quasi-experimental approach for measuring the effect of the use of Digital Health Records on the quality of public health services deliver and the implementation of preventive care strategies.

## RESULTS MATRIX

<b>Objective:</b>	The project will help improve the overall management of health services, including services related to the prevention and early care of chronic non-communicable diseases. To achieve this improvement, the project will pursue the following specific objectives: (i) enhance the quality of the interoperable information in the National Electronic Health Record System (HCEN); and (ii) expand the use of HCEN data for patient management and for the monitoring of health objectives and delivery-of-care goals.
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## EXPECTED IMPACT

Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Project end	Means of verification	Comments
Percentage of hypertensive persons diagnosed and treated	%	39.3%	2019				45%	Health objectives tracking report, Ministry of Health	

## EXPECTED OUTCOMES

Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Project end	Means of verification	Comments
<b>Outcome 1: Improved quality of interoperable data in the HCEN</b>									
Percentage of persons with a medical summary on the HCEN platform	%	0	2019	3	9	17	17	HCEN platform monitoring system	Denominator: Population projection from the National Statistics Institute (INE)  Target: Persons older than 65 and younger than 14 total 1,158,000. Of these, 60% are retrievable, amounting to 17% of the population.

Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Project end	Means of verification	Comments
Percentage of persons with a structured MDS	%	0	2019	5	15	34	34	HCEN platform monitoring system	
Percentage of clinical events with an MDS entered in the HCEN	%	0	2019	36	45	54	54	HCEN platform monitoring system	
Percentage of health professionals and technicians satisfied or very satisfied with the HCEN platform	%	63	2018		75		80	AGESIC's biannual survey on health and information and communication technologies	Composite indicator based on a series of items from the survey
<b>Outcome 2: Expanded use of the HCEN to monitor health objectives and targets</b>									
Number of health objectives monitored through the population tracking system	Number	0	2019	2	4	6	6	National Health Council reports	

#### COMPONENTS AND OUTPUTS

Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Project end	Means of verification	Comments
<b>Component 1: Platform and related services</b>									
HCEN system updated	System	1	2019	1	1	1	3	Executing agency status reports	
Country-wide system for managing the prescription and dispensing of medications, implemented	System	0	2019	0	0	1	1	Executing agency status reports	
System of structured medical data catalogs, designed	System	0	2019	0	0	1	1	Executing agency status reports	

Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Project end	Means of verification	Comments
SNOMED terminology services, implemented	Services	0	2019	1	1	1	3	Executing agency status reports	Software, database, and consultation system
Cybersecurity model for the HCEN platform, implemented	Model	0	2019	0	0	1	1	Executing agency status reports	In coordination with the SOC
<b>Component 2: Promotion of data use</b>									
Strategy to promote and adopt MDS in the HCEN, implemented	Strategy	0	2019	1	0	0	1	Executing agency status reports	
Digital strengthening projects at healthcare providers, implemented	Projects	0	2019	0	5	5	10	Executing agency status reports	
Strategy to promote and adopt a cybersecurity framework for the use of the MDS in the HCEN, implemented	Strategy	0	2019	0	0	1	1	Executing agency status reports National Health Council reports	
HCEN population tracking system, implemented	System	0	2019	0	0	1	1	Executing agency status reports	
Health sector cost-effectiveness data reporting system, implemented	System	0	2019	0	0	1	1	National Health Council reports	
Knowledge transfer strategy, implemented	Strategy	0	2019	0	0	1	1	Executing agency status reports	

## **FIDUCIARY AGREEMENTS AND REQUIREMENTS**

**Country:** Uruguay

**Project number:** UR-L1163

**Name:** E-Government Management Project in the Health Sector III (UR-L1163). Third Individual Loan under the Conditional Credit Line for Investment Projects (CCLIP) for the E-Government Management Program in the Health Sector (UR-X1009)

**Executing agency:** Eastern Republic of Uruguay, through the Agency for the Development of e-Government and the Information and Knowledge Society (AGESIC)

**Prepared by:** Abel Cuba and Emilie Chapuis (FMP/CUR)

### **I. EXECUTIVE SUMMARY**

- 1.1 This operation is the third investment loan under the CCLIP UR-X1009. The total cost of the project is US\$7.35 million, of which US\$6 million will be financed with the Bank's Ordinary Capital resources.
- 1.2 The borrower is the Eastern Republic of Uruguay, and the project executing agency will be the borrower, acting through AGESIC. This agency's organizational and administrative structure will be responsible for executing the resources of the operation as well as for arranging timely funding of the local counterpart resources. AGESIC is attached to the Office of the President of the Republic, and one of its key missions is to promote the introduction of information and communications technologies into the management of government agencies and services.
- 1.3 The fiduciary agreements and requirements established for this project are based on AGESIC's track record as executing agency of loan operation 1970/OC-UR and its continuing work in that capacity in operations 2591/OC-UR, 3007/OC-UR, 3625/OC-UR, and 4300/OC-UR. AGESIC is also the executing agency of two new operations in the pipeline (loans 4843/OC-UR and 4867/OC-UR) designed by the Country Office in Uruguay in 2019.

### **II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY**

- 2.1 AGESIC is a model entity within the government. As the executing agency of previous operations and operations currently in execution, it has demonstrated its execution capacity in all areas of management. It has solid procurement experience in accordance with Bank policies and procedures as well as with national rules and regulations. In addition, its processes and overall internal control environment are considered to be adequate as a whole. It is worth noting that its institutional

conditions (human resources, processes, and systems) are well established, which is a strength in terms of its continuity as executing agency for Bank-financed projects.

2.2 This operation will use the following country systems or their equivalents:

- (i) **Budget.** The country budget system will be used.
- (ii) **Treasury.** A special account will be opened at the Central Bank of Uruguay to administer project funds. That account will be attached to the Treasury Single Account, will be in the name of AGESIC, and will specify the name of the project.
- (iii) **Accounting and financial reports.** The executing agency will use the International Project System (SPI), which is the accounting management module in the country's Integrated Financial Information System (SIIF).
- (iv) **Internal control.** As an agency of the Uruguayan central government, AGESIC is subject to expenditure legality (procurement) reviews and to payment intervention by accountants appointed by the Office of the Auditor General (TCR) and the Office of the Comptroller General (CGN), as preventive controls to verify the validity of the procedures employed in the use of the resources it manages.
- (v) **External control.** The TCR, which is on the Bank's list of eligible auditors, has been responsible for the annual audits of projects executed by AGESIC. Its work in this regard has complied with the international auditing standards of the International Organization of Supreme Audit Institutions (INTOSAI).
- (vi) **National Public Procurement System (SNCP).** Upon approval of use of the country procurement system, the SNCP may be used:
  - a. For the procurement of works in amounts below the established threshold for international competitive bidding (ICB) for works (US\$5,000,000 as reference).
  - b. For the procurement of goods and nonconsulting services in amounts below the established threshold for goods and nonconsulting services (US\$500,000 as reference).
  - c. For the selection and contracting of consulting firms in amounts below the established threshold for the selection of consulting firms under the international shortlist method (US\$200,000 as reference).
  - d. For the selection and contracting of individual consultants.

### III. FIDUCIARY RISK ASSESSMENT AND MITIGATION MEASURES

- 3.1 In view of the execution track record of the executing agency, which shows that it has sufficient capacity to manage fiduciary matters in line with Bank policies, and the findings of the risk workshop conducted with AGESIC staff, it was determined that the fiduciary risk for the execution of this loan operation is low.
- 3.2 In terms of human resources, it is worth noting that an accountant who had taken leave from AGESIC during the last eight months rejoined the executing agency's team, strengthening its institutional capacity in the fiduciary area.

### IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF CONTRACTS

- 4.1 **Exchange rate.** Financial reporting in dollars will use the exchange rate on the effective date of the payment made by AGESIC to the contractors, specifying the conversion method indicated in Article 4.10(b)(ii) of the General Conditions of the loan contract.
- 4.2 **Audited financial statements** will be submitted by the executing agency within 120 days following the end of each fiscal year. The terms of reference will be agreed upon with the Bank, specifying the delivery deadline indicated in Article 7.03 of the General Conditions of the loan contract. The final audit report will be submitted within 120 days following the date of the last disbursement.

### V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 The Bank's policies for the procurement of works and goods and for the selection and contracting of consulting services will be applicable to the procurement activities envisaged for this operation, considering, however, the provisions set forth in paragraph 2.2(vi) of this document.
- 5.2 Procurements will be included in the [procurement plan](#), which will initially cover a period of at least 18 months and will subsequently be updated on an annual basis. This procurement plan will be registered, approved, and posted in the Electronic Procurement Plan System (SEPA) ([www.iniciativasepa.org](http://www.iniciativasepa.org)) prior to the start of any procurement process. Once registered, it will be updated annually or as needed in the event of substantial changes to the original plan. The executing agency will submit the procurement plan to the Bank for prior approval, indicating: (i) the procurement of goods and services required to implement the project; (ii) the proposed methods for the procurement of goods and the selection and contracting of consultants; and (iii) the procedures used by the Bank to supervise procurement. Any proposed revision of the procurement plan will be submitted to the Bank for approval.
- 5.3 The project sector specialist will be responsible for reviewing the appropriateness of expenditures, i.e., the terms of reference, technical specifications, and budget, and will in all cases require a no objection prior to the start of the procurement process and in line with the sector specialist's operational criteria.

## A. Procurement execution

- 5.4 In view of the existence of satisfactory national rules and regulations on the procedures for giving bidders access to bidding files and the possibility of allowing them access to bidding documents, and since this practice is regulated (Amended Laws and Regulations on Accounting and Financial Administration (TOCAF), Articles 65 and 67, and Law 18,381), AGESIC may, in this operation, make use of that legislation, adapting the bidding documents to be used as needed, which will require the Bank's prior no objection.<sup>1</sup>
- 5.5 No exceptions to the Bank's procurement policies are requested. The applicable thresholds will be the ones set out on the Bank's website: [www.iadb.org/en/projects/project-procurement](http://www.iadb.org/en/projects/project-procurement).
- 5.6 **Procurement of works, goods, and non-consulting services.**<sup>2</sup> Any contracts generated under the project that are subject to international competitive bidding (ICB) will be executed using the standard bidding documents issued by the Bank. Bidding processes subject to national competitive bidding (NCB) will use bidding documents satisfactory to the Bank or, as applicable, the SNCP upon its approval for use as indicated above.
- 5.7 **Selection and contracting of consultants.** Nine single-source selection processes are anticipated, for a total amount of US\$964,919. The justification for using this method is set forth in the operation's procurement plan annexed to this document and specifically covers the following:
- (i) Contracting of terminology consulting services from the Hospital Italiano de Buenos Aires (HIBA) in the amount of US\$159,718. This single-source selection is justified under section 3.11(a) of the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-15), which states that this method may be appropriate for services that present a natural continuation of previous work carried out by the firm, and under section 3.11(d), which allows for single-source selection when the provider has experience of exceptional worth.
  - (ii) Selection of individual consultants: Due to the need to maintain continuity of the technical approach during project execution, the procurement plan calls for rehiring eight individual consultants who were previously hired with resources from the second operation under the CCLIP (loan 4300/OC-UR) and who will continue to provide services for this operation for a total amount of US\$805,201 over the project's full execution period. It is worth noting that all consultants have been selected under a competitive process and renewal of their contracts is evaluated annually by AGESIC on the basis of performance and results. Moreover, the terms of reference and contractual terms and conditions for these consultants will remain unchanged, and thus the request fulfills the requirements of section 5.4(a) of

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<sup>1</sup> The above-described procedure is part of a country practice to promote transparency in procurement and is not in conflict with the Bank's policies. To ensure that the procedure is carried out in practice in accordance with the Bank's policies, the bidding documents will require the Bank's no objection.

<sup>2</sup> Document GN-2349-15, paragraph 1.1: Nonconsulting services are treated as goods.



document GN-2350-15, which provides for single-source selection based on continuation of services.

- (iii) In addition, the project calls for the contracting of consulting and nonconsulting services through the United Nations Office for Project Services (UNOPS), the United Nations Development Programme (UNDP), or the Julio Ricaldoni Foundation pursuant to agreements with AGESIC currently in force, which will be submitted to the Bank prior to any contracting under the relevant agreement. The agreement will indicate that the contracting is to be carried out in accordance with the Bank's policies and procedures.

- 5.8 **Main procurement items.** All procurement envisaged for this operation is included in the initial procurement plan, which covers a period of 18 months and forms part of the list of annexes to this document.
- 5.9 **Procurement supervision.** Procurement activities will in principle be subject to ex post review, with the following exceptions: (i) single-source selection; (ii) procurement for an estimated amount exceeding the ICB threshold, as indicated in paragraph 5.9 of this document; and (iii) activities for which the executing agency and the Bank mutually agree that ex ante supervision will apply. In addition, the initial review method is ex post, subject to the indicated conditions and any agreed-upon modification, which will be reflected in the procurement plan. ICB and single-source selection for consulting services exceeding US\$200,000 will be subject to ex ante review.
- 5.10 **Records and files.** Project reports will be prepared and filed using formats and procedures that have been agreed upon and are in keeping with the relevant requirements under the Bank's policies.

## VI. FINANCIAL MANAGEMENT

### A. Programming and budget

- 6.1 AGESIC will conduct budgetary programming and formulation on the basis of the agreed annual work plan, which is based on the project's multiyear execution plan. The budget is managed through the SIIF.

### B. Accounting and information systems

- 6.2 The project will keep its accounts in the International Project System (SPI) accounting module, which is linked to the SIIF.
- 6.3 The project financial statements<sup>3</sup> will be issued in accordance with generally accepted accounting standards.

### C. Disbursements and cash flow

- 6.4 Disbursements will be channeled through the Treasury Single Account at the Central Bank of Uruguay (BCU). An operating account will be opened at Banco de la República Oriental del Uruguay.

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<sup>3</sup> Statement of cash received and disbursements made, and statement of cumulative investments.

- 6.5 Disbursements will be made in the form of advances of funds based on actual liquidity needs and supported by sound financial projections. These advances will preferably be made every six months, after supporting documentation has been submitted for at least 70%<sup>4</sup> of the previous advance. Disbursements will be governed by the Bank's operational instructions and may be processed electronically.

**D. Internal control and audit**

- 6.6 In accordance with the TOCAF, the TCR will conduct pre-emptive control of all expenditures related to project execution. Moreover, under current laws and regulations, AGESIC is an agency subject to the supervision of the National Internal Audit Office (AIN).

**E. External control and reports**

- 6.7 The annual project audits may be conducted by the TCR or by an independent audit firm deemed eligible by the Bank. External audits will be governed by the Financial Management Guidelines for IDB-financed Projects (OP-273-12).
- 6.8 Financial audit reports will be submitted annually during the disbursement period, within 120 days following the end of each fiscal year. The final project audit report will be submitted 120 days from the date of the last disbursement.

**F. Financial supervision plan**

- 6.9 The financial supervision plan will address the following:
- (i) Participation in the launch workshop.
  - (ii) Regular review of the annual work plan and financial plan prepared by the executing agency to ensure they are mutually consistent.
  - (iii) Based on the regular evaluation of project risks, onsite financial visits may be conducted.

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<sup>4</sup> Under OP-273-12, the use of this percentage is justified by the fact that central administration entities such as AGESIC are required to have financing in place in Central Bank accounts before committing new obligations. In addition, the processing of payments requires the pre-emptive intervention of the TCR and the CGN, which increases the time required to process payments.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_\_/20

Uruguay. Loan \_\_\_\_/OC-UR to the Eastern Republic of Uruguay. E-Government Management Project in the Health Sector III. Third Individual Loan under the Conditional Credit Line for Investment Projects (CCLIP) for the E-Government Management Program in the Health Sector (UR-X1009)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Eastern Republic of Uruguay, as borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the E-Government Management Project in the Health Sector III, which is the third individual operation under the Conditional Credit Line for Investment Projects (CCLIP) for the E-Government Management Program in the Health Sector (UR-X1009) approved by Resolution DE 123/13 on 16 of October 2013. Such financing will be in the amount of up to US\$6,000,000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_ 2020)

LEG/SGO/CSC/EZSHARE-1028536987-11426  
UR-L1163