



EFFECTIVE STRATEGIES, TOOLS AND ACTIONS IMPLEMENTED BY EMERGENCY AND SECURITY SERVICES IN THE REGION TO ADDRESS THE COVID-19 PANDEMIC

DOCUMENT OF EXPERIENCES No 1
STG/ESS/INF.17-21

Effective Strategies, Tools and Actions Implemented by Emergency and Security Services in the Region to Address the COVID-19 Pandemic

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Effective Strategies, Tools, and Actions Implemented by Emergency and Security Services (or similar agencies) in the Region to Address the COVID-19 Pandemic

I. INTRODUCTION

The COVID-19 pandemic has caused a widespread health crisis and resulted in the deaths of approximately 4.44 million people worldwide.

No country was prepared to face, contain, and mitigate such a pandemic, which, together with measures that included mobility restrictions, lockdowns, and social distancing, brought with it multiple adverse consequences in the economic, political-institutional, educational, and social spheres, as well in terms of crime, violence, and physical and mental health.

Faced with this scenario, the emergency and security services or similar agencies in the region have had to develop new strategies, tools, and lines of action to respond to emergencies that have arisen during the pandemic.

This first working document of the Subsidiary Technical Working Group on Emergency and Security Systems (STG-ESS), chaired by Ecuador through its ECU-911 Integrated Security Service (SIS ECU-911), seeks to systematize, present, and share strategies, tools and actions that have been effective in dealing with the COVID-19 pandemic. The digital version of the document is set out in the ESS Community's ESS Map on COVID-19.¹

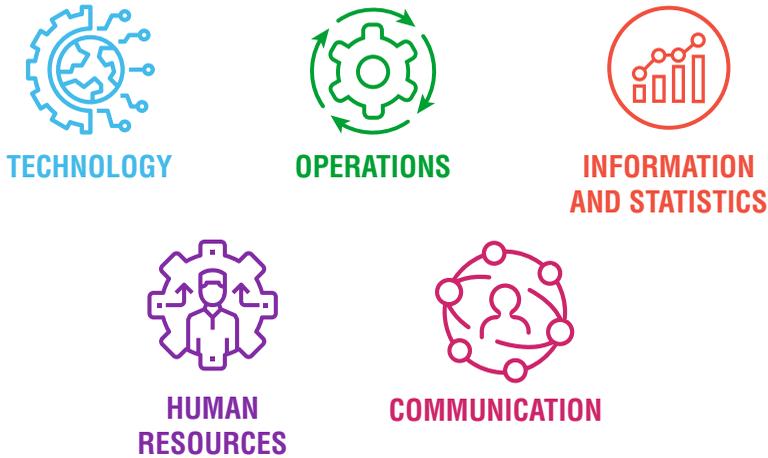
The hemispheric systematization exercise began during the first meeting of the STG-ESS, held on May 6 and 7, 2021. In the second panel of that meeting, SIS ECU-911 of Ecuador, the 911 National Emergency System of Honduras, the 911 National Emergency System of Panama and the 911 National Emergency System of Paraguay presented their experiences of adaptation, learning, and innovation to tackle problems caused by the COVID-19 pandemic.

Subsequently, following up on recommendations 2 and 6 that resulted from the first meeting of the STG-ESS, SIS ECU-911, as chair of the Working Group, with support from the Department of Public Safety, organized the First Roundtable on Effective Strategies, Tools, and Actions Implemented by Emergency and Security Services (or Similar Agencies) in the Region to Address the

1 The SES Map systematizing the strategies, tools, and measures implemented by emergency and security systems (or similar agencies) against the COVID-19 pandemic is available at <https://portal.educoas.org/es/redes/oeadsp/mapa-ses-ess-map>

COVID-19 Pandemic. This first roundtable of 2021 took place on July 1 and included interventions by SIS ECU-911, the 9-1-1 Emergency System of Costa Rica, the National Emergency Service of Honduras, the National Information Center of Mexico, the National 9-1-1 Emergency System and SUME of Panama, and the National Emergency Number Association (NENA) and Mission Critical Partners of the United States.

The systematization exercise gathers the strategies, tools, and actions implemented by emergency and security systems or similar agencies in the region, categorizing them into five areas:



The Human Resources and Communication areas are further divided into three and two subcategories, respectively.

This hemispheric systematization exercise is guided and inspired by several purposes:

- Learn about the experiences of emergency and security systems or similar agencies adapting to and tackling COVID-19.
- Identify commonalities and similarities between entities.
- Learn from successes and failures.
- Make the necessary changes based on shared experiences to be better prepared for a future crisis.

II. REGIONAL OVERVIEW



2.1 Area of technology

In the area of **technology**, there are at least two countries whose emergency services took advantage of the pandemic to innovate and design new tools. SIS ECU-911 did so in order to apply and monitor the protective measures implemented by the Government to prevent the spread of the virus and protect the population from contracting it. Honduras' 9-1-1 National Emergency Assistance System developed a telemedicine platform. Some 911 agencies in the United States, made the necessary technological innovations to enable remote call handling and dispatch. In the case of SUME 911 in Panama, new technological tools were incorporated, such as tablets with a mobile CAD (computer-aided dispatch) application.



2.2 Area of operations

In terms of their **operations**, Costa Rica's 911 Emergency System, SIS ECU-911, and Panama's SUME 911 reported greater interagency coordination as a result of the health crisis. The 911 National Emergency System of Honduras, and the 911 National Emergency System of Panama mentioned the adoption of biosafety measures and equipment. SIS ECU-911 and the National Information Center of Mexico reported that the standardization of the assistance protocols for COVID-19 cases was the result of their adaptation to the new health circumstances. Some 911 agencies in the United States, as well as Panama's SUME 911, have also incorporated new screening questions on COVID-19, in addition to introducing changes in dispatch procedures, and making adjustments to policies and protocols for receiving calls, respectively. The Costa Rican 911 Emergency System and SIS ECU-911 created a series of prefixes or specific codes for alerts and/or emergencies related to the pandemic, which not only allowed for a more assertive, focused, and coordinated response, but also for the preparation of statistical reports with updated and reliable data. The Costa Rican Emergency System, SIS ECU-911, and some 911 agencies in areas severely affected by COVID-19 in the United States, focused their strategies, measures, and actions to raise public awareness about the proper use of the emergency line. The Honduran 911 National Emergency System and some emergency

services in the United States took advantage of the circumstances to update and adjust their contingency and continuity of operations plans, respectively.

The region’s emergency and security services have also made clear innovations in the area of **operations**. In the case of Costa Rica’s 911 Emergency System, a psychological care service was established; a process was defined, and the necessary tools were provided for handling calls in Costa Rican sign language; and the Public Assistance Line (LAC, for its Spanish acronym) 13-22 was activated. For its part, Mexico’s National Information Center reported that as a result of interagency agreements and coordination, as well as the development of support tools, the Emergency Call Centers (CALLE, for its Spanish acronym) began to play a key assistance and response role in relation to situations of violence against women, children, and adolescents.



2.3 Area of information and statistics

In the area of **information and statistics**, the systems in Costa Rica, Ecuador, Honduras, and Panama were able to generate specific data and indicators on the incidence and impact of COVID-19 and, in some cases, on compliance with the distancing and protection measures introduced by governments. In all cases, the emergency and security systems of these four countries emerged as reliable sources of information to guide decision making in the context of the pandemic. In the specific case of SIS ECU-911, the capacity to generate statistics related to health emergencies was accompanied by an improvement in database management, data visualization, and presentation.



2.4 Area of human resources

2.4.1 Working conditions and modalities

With regard to **working conditions and modalities**, which corresponds to the first component surveyed in the **area of human resources**, three systems reported having adopted a mixed work modality (Costa Rica, Ecuador, and Mexico). The emergency services in the United States, Honduras, and Panama, kept only essential personnel on site, while anyone with preconditions or in the at-risk age range were exempted or were able to continue working from home. In Ecuador and Panama, emergency and security systems’ personnel were vacci-

nated in the first phase of the national vaccination campaigns, which helped to ensure the presence of these officials and continuity of service. The 911 National Emergency System of Honduras, 911 emergency services in the United States, and SUME 911 of Panama reported having adopted biosafety and protection measures to safeguard the physical and mental health of staff, in addition to adapting work facilities to comply with social distancing measures. Honduras' 911 National Emergency System, Mexico's CNI, and Panama's SUME 911 reported having made modifications to shifts and working hours to protect personnel and respect the social distancing guidelines. The most widespread and intensive adoption of technological tools to facilitate communication and coordination were those reported by the United States, Honduras, and Mexico.

2.4.2 Staffing levels

The countries adopted creative and practical strategies to **make up for staff losses**, including training administrative staff in operational tasks, creating contingency teams (calling on former staff), simplifying recruitment processes, and speeding up the induction process for new staff.

2.4.3 Training of staff

In the area of **personnel training**, the cases of the National Emergency System of Honduras and the CNI of Mexico stand out. Both emphasized the need to provide training courses for personnel to assist vulnerable groups such as minors at risk and women victims of violence. In addition, the National Emergency System of Honduras provided its personnel with training on epidemic safety and the environment, while the CALLES of Mexico trained its operators in assisting members of the LGBTQI+ community and persons with disabilities.



2.5 Area of communication

2.5.1 Regarding the general population

The main innovations in the area of **communication** with the public were the creation of COVID-19 public assistance hotlines (Costa Rica and Panama) and the development of applications (Honduras and Panama). One of the main benefits of these innovations is that they helped keep the 911 emergency line from becoming congested and overwhelmed. Consistent with the actions carried out by the CNI and CALLES in Mexico, the National Emergency System

of Honduras carried out media campaigns against domestic violence, disseminating the 911 line for requesting assistance or reporting incidents.

2.5.2 Regarding fake news and disinformation

Regarding the **fight against fake news and disinformation**, the countries that participated in this consultation provided information on internal strategies and measures for keeping personnel well informed and up to date, as well as external ones targeting the public. With respect to the public, participating countries reported the use of conventional and social media for disseminating publications, information, and official statistics in a timely manner and with certain regularity.

III. OVERVIEW BY COUNTRY



3.1 Innovation experiences in the TECHNOLOGY AREA

3.1.1 Ecuador > ECU 911 Integrated Security Service

Implementation of a cooperation project with the Inter-American Development Bank (IDB) for the development of **Distance System**. This system allowed the integration and use of SIS ECU-911 video surveillance cameras for constant monitoring of the population, identification of clustering, and compliance with the restrictions established by the Government to prevent the spread of the virus and disease.

Execution of the **ARM3** cooperation project with the Armed Forces University ESPE, which involved the use of drones to monitor the behavior of people in large spaces such as beaches, recreational areas, and other places.

Both technological projects allowed:

- More accurate identification of crowding.
- Timely and precise alerting of authorities.
- Enforcement of social distancing measure (at least two meters between people).
- Generation of statistics to guide decision-making by national authorities.
- Facilitation of an orderly reopening of beaches.

However, its implementation was not without challenges, including:

- Difficulty of integrating certain types of cameras.
- Limitation of technological resources to facilitate the transfer of information from large numbers of cameras.
- How to inform and provide feedback to the public so that they might comply with distancing measures.

3.1.2 United States > NENA and MISSION CRITICAL PARTNERS

Some public-safety answering points with mobile command centers or standby sites were set up as **secondary operations centers**. This in turn made it possible to keep **shifts separate** from each other, enabling **thorough cleaning** of facilities during shift changes.

Other public-safety answering points used their **mobile command centers** as quarantine sites for personnel who had been exposed to COVID-19 but were asymptomatic.

A few public-safety answering points were able to **handle calls and dispatch remotely**, allowing staff to work from home. At a South Florida 911 center, 50 packets were assembled to enable operators to take calls from their homes.

As far as **remote call management** is concerned, the configuration of the equipment can be classified into three categories:

- Facility based
- Hosted/remote
- Cloud-based or call handling as a service (CHaaS).

The most common configurations were the first and second.

As regards **remote computer-aided dispatch**, there are three options:

- From a backup site
- From a connected alternate site
- From a remote access to the workstation

In the specific case of the third option, some requirements have to be met:

- Network connectivity between the primary server of the computer-aided dispatch and the workstation
- A workstation/computer from which to work with the software
- Remote access software for easy connection (optional)

Incorporation of the **use of multiple monitors** and adoption of protection measures against possible **cyberattacks**.

For **remote dispatch**, 9-1-1 agencies considered four options:

- Portable radios
- Control stations
- Generic dispatch workstation
- Specific remote-dispatch consoles provided by suppliers

When selecting a remote dispatch option, the following elements must be taken into account:

- Reliability of coverage
- Radio programming for key channels and working group
- Dispatcher training
- Availability/accessibility of broadband network

In addition to the equipment for remote call management, it is necessary to consider the type of network that supports incoming calls to the emergency call center (voice and data). Without proper advance planning, legacy or traditional networks can present major challenges for a rapid transition.

Most of the public-safety answering points with staff working remotely, either from their own homes or from other locations, used some form of **video-conferencing service** so that they could be in constant communication and contact, as if they were physically sitting in the same place.

3.1.3 Honduras > 911 National Emergency System

Development and implementation of the **ASCLEPIO telemedicine platform**, including the generation of digital medical records, medical appointment scheduling, and prescription management.

The platform's construction was supported by two physicians and four developers. In a period of 15 days, they went from 2 physicians to 62. This increase was due to the support and interest that the project elicited in the executive branch. The increased number of physicians, in turn, made it possible to have qualified personnel for care, analysis, and support in operational decision making.

3.1.4 Panama > SUME 911

Incorporation of the **use of tablets** with the mobile CAD application to generate and print care sheets, reducing the possibility of contact and virus transmission.



3.2 Innovation experiences in the OPERATIONS AREA

3.2.1 Costa Rica > 9-1-1 Emergency System

Coordination with the Ministry of Health for **follow-up on suspected cases of COVID-19** reported to the emergency hotline.

Collaboration with the Costa Rican Social Security Fund for the **transfer of patients infected or thought to be infected with COVID-19**.

Enabling **psychological support** for people with anxiety or disorders caused by the pandemic or lockdown measures.

Call handling in Costa Rican sign language (LESCO, for its Spanish acronym), to provide information on COVID-19 for the deaf.

Creation of a specific service to assist members of the public with matters related to COVID-19, through the activation of the **Public Assistance Line** (LAC, for its Spanish acronym) **13-22**. The main justification for the implementation of this service was to avoid clogging the 9-1-1 line. In turn, LAC 13-22 allowed the public to receive appropriate guidance and information on the COVID-19 pandemic in a timely manner.

This alternate line encountered four problems:

- Lack of human resources
- Lack of technological equipment
- Limited financial resources
- Lack of adequate physical space for the installation of offices and an operations center.

All these obstacles were eventually overcome.

3.2.2 Ecuador > ECU 911 Integrated Security Service

3.2.2.1 Reducing misuse of the single emergency number

SIS ECU-911 has identified a high number of improper calls, which cause economic losses and affects service response times at the various centers nationwide.

This is particularly serious when it jeopardizes the possibility of attending properly to real emergencies where human lives are at stake.

During the state of emergency declared from March 16 to September 13, 2020, as a result of the pandemic, 1,497,387 improper calls to the single emergency number were recorded. This cost the service US\$3,833,310.72, based on an average call of 1 minute, 50 seconds that costs US\$2.56.

SIS ECU 911 adopted a series of measures in response to this problem:

- Application of the **Technical Standard for Provision of Emergency Telecommunication Services**, which stipulates the short-term, long-term suspension, and permanent suspension of telephone numbers from which the single emergency number is misused.
- Permanent **awareness campaign** about the proper use of the single emergency number.
- Incorporation of **preventive messages** the third time an improper call is made.

- Adoption of MINTEL Ministerial Decision No. 0004-2020, issuing **rules on the imposition of fines** (exclusively for the state of emergency). However, the fines could not be collected due to a legal issue.

Suspension data for improper use of the single emergency number recorded by SIS ECU-911, showed a 23 percent reduction between 2019 and 2020, and 59 percent from 2019 to 2021. In absolute terms, in the first half of 2019 there were 86,375 improper calls; in the same period of 2020, there were 66,131 improper calls, in the first half of 2021 there were 47,383 such calls. Despite the significant reduction, there is still a high percentage of improper calls that hinder the effective and efficient operation of the system.

3.2.2.2 Creation of prefixes for alerts and/or emergencies

To receive, evaluate and route calls, SIS ECU-911 use a software application that allows operators to identify the type of alert based on an incident catalog.

The system's catalog did not have specific codes or incidents for emergency assistance in connection with COVID-19 and related events (including clustering, epidemiological barriers, curfews, and corpse removal).

As a result of not being able to identify or categorize incidents related to or arising from COVID-19, it was impossible to coordinate actions with the agencies concerned to address alerts and/or emergencies related to non-compliance with social distancing mandates and to enforce biosafety measures established to protect the public and prevent the spread of the virus. Likewise, it was not possible to interlink or coordinate assistance to alerts for non-compliance with the mandatory preventive isolation for confirmed COVID-19 cases.

In response to this situation, the National Operations Directorate, in coordination with the National Data Analysis Directorate, established the following **prefixes**:

- **ESPII**: for assistance to alerts and/or emergencies involving individuals infected with COVID-19.
- **AGLO**: for identification of persons not complying with social distancing and biosafety rules in public spaces.
- **CERCOE**: for identification of persons failing to comply with mandatory preventive isolation of confirmed cases.
- **CURFEW**: for identification of persons failing to comply with the nationwide mobility restriction provision established by an executive decree issued by the National Emergency Operations Committee (COE-N, for its Spanish acronym).
- **CORPSE REMOVAL**: for identification of incoming alerts of possible deaths of persons from COVID-19 infection.

The National Emergency Operations Committee (COE-N) set up different technical working groups to establish the **requirements to identify alerts and/or emergencies** related to or arising from the pandemic. Likewise, SIS ECU-911 established technical roundtables with the Ministry of Health to jointly develop an **Interinstitutional Cooperation Protocol** for attending to calls from the public in the context of the pandemic.

In relation to the Inter-institutional Cooperation Protocol for dealing with alerts reported using the ESPII code, the National Operations Directorate proceeded to distribute the document across the country, so that operators receiving the alerts could log them using the ESPII prefix. This log entry triggers emergency assistance through Health Management.

With respect to the AGLO prefix, a provision was issued so that the call and video surveillance areas could identify alerts reported by members of the public or registered by video surveillance cameras and proceed with the appropriate log entry. This entry transfers the emergency to the Citizen Security Management and Municipal Services Management to ensure compliance with the provisions issued by COE-N.

In the case of alerts reported due to non-compliance with mandatory preventive isolation of confirmed cases, the log entry with the relevant prefix results in the call being referred to Citizen Security Management for verification of the emergency and application of the appropriate procedure.

Records under the CURFEW code, identified alerts related to non-compliance with the nationwide mobility restriction provision. This identification enabled the possibility of coordinating joint measures with the National Police and the Armed Forces.

Regarding the removal of corpses, SIS ECU-911 participated in a technical working group in which two interinstitutional cooperation protocols were developed for handling and final disposal of corpses in cases of confirmed or suspected COVID-19 deaths at healthcare facilities or otherwise. These procedures were established in order to receive alerts via SIS ECU-911 and coordinate emergency responses with the relevant agencies.

As a result of the adoption of these measures, SIS ECU-911 was able to **standardize procedures for attending to alerts and/or emergencies** related to or arising from the COVID-19 pandemic, ensure **proper assistance** based on the correct identification of the incident and the coordinated involvement of the appropriate agencies, and generate **specific statistics**.

3.2.3 United States > NENA and MISSION CRITICAL PARTNERS

Introduction of **additional questions** that 911 operators had to ask those who called the emergency number.

Incorporation of **changes to dispatch procedures**. Previously, before the pandemic, dispatching an ambulance could also include the deployment of firefighters to provide first aid or additional human resources on the ground. During the pandemic, such “joint” dispatches were avoided.

In areas not overly affected by the virus, coupled with the advice to people to stay at home, there has been a drop in the volume of calls. However, severely affected areas saw sharp fluctuations in the volume of calls related to medical emergencies. In view of these changes, it was important to inform the public about the **proper use of the emergency number** and to differentiate it from other lines set up for inquiries or report non-emergency situations.

Development, implementation, and update of **continuity of operations plan**.

Identification of **remote workstations**, both at and away from existing facilities.

Review of policies for authorizing remote operation and establishing guidelines on how and when to implement such policies. Incorporation of guidelines/indications on information technology and **cybersecurity**.

3.2.4 Honduras > 911 National Emergency System

Creation of **biosafety mechanisms** through development and activation of protocols. Triage process from the moment personnel enter the facility.

Creation of **decision-making teams** to analyze what to do when faced with different situations that arise.

Projection of multiple scenarios based on qualitative and quantitative analysis exercises. These in turn allowed the development of different **contingency plans**, consisting of a wide array of immediate responses, aimed at reducing time and decision-making processes. Thus, the continuity of emergency assistance and response in the context of the COVID-19 pandemic was strengthened.

3.2.5 Mexico > CNI

3.2.5.1 Standardized and coordinated assistance in cases of violence against women, children, and adolescents

The lockdown and isolation caused by the COVID-19 pandemic brought collateral problems, including domestic and intimate partner violence. Faced with this scenario, on March 19, 2020, the Ministry of the Interior convened a meeting with personnel from the Integral Family System (DIF, for its Spanish acronym), the Ministry of Welfare, the National Institute for Social Development (INDESOL, for its Spanish acronym), the National Institute for Women (INMUJERES, for its Spanish acronym), the Ministry of Health, the National Commission to Prevent and Eradicate Violence against Women (CONAVIM, for its Spanish acronym), the National System for the Integral Protection of Children and Adolescents (SIPINNA, for its Spanish acronym), the Office of the President of the Republic, and the Executive Secretariat of the National Public Security System, which was represented by personnel from the 9-1-1 Emergency Service area of the National Information Center.

At that meeting, staff from the National Information Center commented that the 9-1-1 emergency number had the capacity to respond 24 hours a day, 365 days a year and that the staff had a specific protocol for handling calls concerning violence against women, to which a flow chart was added. In addition, the 9-1-1 operators had been trained by the National Women’s Institute to provide specialized assistance.²

Based on this information, it was decided at that meeting that the **9-1-1 emergency number** would be the line to be used and disseminated to **deal with situations of violence against women, children and adolescents**. In addition, an **Interinstitutional Coordination Protocol for the Protection of Children and Adolescent Victims of Violence** was developed, which defines the course of action to be taken by various entities when a call involving this type of violence is received.

One of the main challenges that this initiative had to overcome was the lack of personnel for psychological care. In response to this situation, several government agencies **teamed up with 9-1-1 to provide psychological professionals to support victims of violence**. In addition, in some states, such as Chihuahua, a program was developed whereby, if a call associated with a situation of violence was received, personnel from the Ministry of Health would follow up and ascertain the health and welfare needs of the persons affected.

² The following online courses were given: “Introduction to equality between women and men” and “For a violence-free life.”

3.2.5.2 Standardized and coordinated care for COVID-19

Development and application of the “Suspected COVID case” **work instructions** to guide and standardize personnel response.

3.2.6 Panama > SNE 911

Space maximization at call centers. Placement of “**barriers**” between workstations.

3.2.7 Panama > SUME 911

Amendments to **policies and protocols for receiving calls**.

Incorporation into the CAD system of **entry/screening questions** for identification of suspected or actual COVID-19 cases.³

Strengthening of **institutional coordination** with the Ministry of Health and the Ministry of Security, maintaining operational links through the entity’s applications.

Establishment of **strategic links** with other public institutions such as the Social Security Fund, the National Institute of Mental Health, and the Fire Department.



3.3 Innovation experiences in the INFORMATION AND STATISTICS AREA

3.3.1 Costa Rica > 9-1-1 Emergency System

Creation of codes/events to classify and identify calls specifically related to the pandemic. This, in turn, made it possible to generate accurate, reliable, and timely statistics related to COVID-19. As an example, the code/event “471-Compliance with COVID-19 measures” was created. Other procedures have also been modified to include information directly related to the pandemic. The generation of codes relating to pandemic-related events has, in turn, allowed tracing of such events.

³ An example of a screener question that was incorporated into the operators’ script was: “Do you have a cough, high fever and difficulty breathing?”

Situation reporting based on call volume and traffic on the 9-1-1 and 13-22 numbers. These reports made up for the lack of information with which the 9-1-1 Emergency System and the response agencies operated. In turn, they served as a basis for analysis and decision making by the Operations Center at the national level.

3.3.2 Ecuador > ECU 911 Integrated Security Service

3.3.2.1 Statistics on the COVID-19 Health Emergency: an adaptation in Power Business Intelligence (BI)

At the beginning of the pandemic, emergency management statistics were consolidated on a weekly basis, using slow technological processes that required the linking of 16 decentralized databases at the subnational level. In addition, the technology integration processes encountered frequent connection failures, resulting in incomplete data.

In view of this situation and the urgent need for **timely and reliable information** for government decision-making at the national, intermediate and local levels, as well as for the sake of accountability and transparency, a data automation, access, and visualization mechanism was urgently required.

It was in this setting that Power BI was incorporated, through a process that included technological, statistical, and training phases, including:

- Correction of data extraction processes through ETL to solve frequent database crashes.
- The design of a dashboard for daily publication of alerts, emergencies, clustering events, curfews, public order disturbances, ESPII codes, scams, and corpse removals.
- Constant validation of statistics to avoid differences in published data.
- Training sessions for the institutions involved and journalists from different media outlets in the country.

3.3.3 United States > NENA

Two **surveys** were conducted. One to understand the initial impacts of COVID-19 on 9-1-1 centers (April 2020). The second on how 9-1-1 centers are changing under COVID-19 (May 2020).

3.3.4 Honduras > 911 National Emergency System

The data generated from the ASCLEPIO telemedicine platform became a primary source of information to perform different **analyses/studies** and guide decision making, including on allocation and prioritization of available resources (e.g., hospital resources, ambulances, etc.) where they were most needed. This resulted in a faster, more orderly, and efficient service.

The data are displayed horizontally as well as longitudinally (in time lines). The analysis of the data made it possible to **identify patterns** from which to anticipate the implementation of measures and actions.

Continuous presentation of statistics to public entities in charge of primary care during the health emergency.

3.3.5 Panama > SUME 911

Generation of **timely and privileged information** for administrative and operational decision making.



3.4 Experiences of innovation in the HUMAN RESOURCES AREA: Working conditions and modalities

3.4.1 Costa Rica > 9-1-1 Emergency System

By administrative resolution, authorization was obtained to adopt a **mixed work modality**, combining face-to-face work with teleworking. For those who were able to work remotely, the necessary computer equipment was provided. In addition, performance targets were set.

3.4.2 Ecuador > ECU 911 Integrated Security Service

SIS ECU-911 adopted a **mixed work modality**. The Ministry of Labor established the telework guidelines. This format was prioritized during the peak infection periods of the pandemic as well as for eligible individuals under the regulations adopted by the Ministry of Labor.

One of the most important strategies for maintaining the assistance provided by the Service at maximum capacity was the **vaccination of staff**, which was done through the Ministry of Public Health.

3.4.3 United States > NENA

911 Center facilities were only available for **essential personnel**; the rest worked remotely.

Introduction of measures to safeguard the **health** and **well-being** of operators who respond to emergency calls.

3.4.4 Honduras > 911 National Emergency System

The **face-to-face working modality** was maintained. Personnel at risk or with medical preconditions were immediately excused.

Shift changes were introduced for operational staff.

Daily triage process to assess each staff member in order to determine if they could continue or if they needed to take a break.

In view of the psychological and physical effects of COVID-19 on personnel, **support was sought from the entity's psychologists**. Development and implementation of programs focused on the **physical and mental wellbeing of personnel** so that the operation of the system would not be affected.

Medical assistance was provided to **family members** of active employees.

Implementation of **digital work agendas** and **virtual meetings** on an ongoing basis.

Creation of a **work team** exclusively to **provide biosafety equipment** and ensure that this equipment was being worn at all times.

3.4.5 Mexico > CNI

Adoption of a **mixed work modality**.

Introduction of a system of **shifts** so that staff could comply with social distancing requirements.

Changes to **equipment** to hold meetings by videoconference as well as to increase data storage capacity.

Regular **virtual meetings** with all CNI staff to ensure continuity of ongoing projects and activities.

Creation of **WhatsApp groups** to maintain the fluidity of daily communications.

Daily census of all personnel, both those working remotely and those working on-site.

3.4.6 Panama > SNE 911

The vaccination campaign began on February 24, 2021. The Government prioritized health, security, and emergency **personnel**. As a result, all Call Center personnel had been **vaccinated** by mid-March. This provided greater security and peace of mind to staff members and contributed to the continuity of service.

3.4.7 Panama > SUME 911

Establishment of **biosafety measures** and changes to work areas.

In the first phase, all employees over 60 years old or with chronic illnesses were granted **early vacation, compensatory time, or special leave**.

In the second phase, to maintain occupancy parameters at offices, comply with social-distancing measures, and mitigate infection risks, **alternate work schedules** were adopted for administrative personnel and **teleworking** arrangements put in place for employees at greatest risk.



3.5 Experiences of innovation in the HUMAN RESOURCES AREA: Staffing levels

3.5.1 Costa Rica > 9-1-1 Emergency System

Due to the staffing shortages caused by the spread of the virus, the 9-1-1 Emergency System proceeded to **pay overtime, suspend scheduled vacations**, and to **postpone continuous training**.

3.5.2 Ecuador > ECU 911 Integrated Security Service

The operational capacity of SIS ECU-911 was reduced due to the infection of staff in the video and call rooms. In response to this situation, SIS ECU-911 arranged for additional resources from the Ministry of Labor and the Ministry of Economy and Finance and proceeded to **train personnel in administrative areas** in established emergency response processes and protocols. These personnel provided support as needed, in line with call volumes and absenteeism caused by infections. In this way, operational performance was strengthened, particularly during peak infection periods, and the service and emergency assistance coordination were not impaired.

3.5.3 United States > NENA

Development of contingency plans for **rapid personnel recruitment**.

Acceleration of the training cycle for new recruits.

Former employees who remained in good standing with the entity were invited to serve as **contingency personnel** in the event that staffing levels became critical.

3.5.4 Honduras > 911 National Emergency System

Creation of standby groups, permanently available and ready to deploy, according to need and circumstances.

Mutual support among the five centers that make up the National 911 Emergency System.

3.5.5 Panama > SNE 911

COVID-19 resulted in a 30 percent reduction in personnel. In view of this situation, **the working day was increased from 8 to 12 hours**.

3.5.6 Panama > SUME 911

The increase in the number of calls and assistance, together with absences due to illness, led to the implementation of the following measures.

1. Establishment of **extra shifts**
2. Temporary **cancellation of all vacation leaves**
3. **Cancellation of compensatory time off and leave**



3.6 Experiences of innovation in the HUMAN RESOURCES AREA: Training

3.6.1 Costa Rica > 9-1-1 Emergency System

Suspension of continuous training processes, which had a positive impact on personnel availability.

3.6.2 United States > MISSION CRITICAL PARTNERS

Incorporation of a training program on **how to operate remotely**. Courses and training imparted remotely.

3.6.3 Honduras > 911 National Emergency System

Training on **epidemic safety**. Biosafety education has become a daily activity.

Training on how to respond to calls from **victims of domestic violence**.

Training in the care of **minors in high-risk situations**.

3.6.4 Mexico > CNI

Training of more than 5,500 9-1-1 emergency service operators and replicators on 6 specific topics:

1. Assistance to **LGBTQI+ persons**.
2. **Protection for children and adolescents, victims of violence**.⁴
3. Telephone intervention for **women victims of intimate partner violence**,⁵ including basic psychological first aid to service users.
4. **Active listening and assistance** to violence against women.⁶
5. **Rapid training** on violence against women and girls for operators.⁷
6. Advice on how to provide **telephone assistance for persons with disabilities**.⁸

4 This course was prepared by the Executive Secretariat for the Comprehensive Protection of Children and Adolescents, the Office of the Ombudsperson for Children and Adolescents, the Directorate General for Gender Equity and Reproductive Health of the Ministry of Health, UNICEF, and the National System for the Comprehensive Development of the Family.

5 A course developed by the Directorate General for Gender Equity and Reproductive Health of the Ministry of Health and Eurosocietal, a European Union agency.

6 A course imparted by the National Council for the Prevention of Discrimination with the support of the National Women's Institute.

7 A course that is part of the United Nations Spotlight initiative. It is divided into an introductory module and five content modules.

8 With support from Teletón Foundation.



3.7 Innovation experiences in the COMMUNICATIONS AREA: Public-oriented

3.7.1 Costa Rica > 9-1-1 Emergency System

Creation of the Citizen Assistance Service through LAC 13-22. This service became the official national-level communication channel for providing information to the public on the COVID-19 pandemic.

Outreach campaigns to encourage the use of the 9-1-1 number for emergencies only and LAC 13-22 for inquiries on COVID-19.

Use of **social networks** and response to **information requests and interviews** from the **media**.

3.7.2 Honduras > 911 National Emergency System

Development of an app –**911covidhn**– to interact with patients. Provided accessibility to people unable to speak or hear.

Activation of a **WhatsApp messaging number**, managed by a physician on duty. It also contributed to greater accessibility and created a private space for communication and exchange.

Use of **social networks** and national **media** to disseminate **official information**, as well as the **availability of the 911 line** for assisting patients with suspected COVID-19 infection.

Constant participation in **campaigns against domestic violence**, making the **911 line available to request support or report incidents**.

3.7.3 Mexico > CNI

The Federal Government implemented the **national “Healthy Distance” campaign** as a strategy to make the public aware of the necessary precautions to avoid infection.

The Mexico City government implemented a **free official information service**, via text message (SMS), to inform the public about COVID-19. One of the objectives of this service is to avoid overwhelming 9-1-1 call centers and to give priority to people with medical emergencies.

3.7.4 Panama > SNE 911 and SUME 911

Following the declaration of a national emergency by the Government of Panama, and the World Health Organization's declaration of a pandemic, it was decided that **all emergency calls related to COVID-19 would be received by the 911 Center**. In addition, alternative free hotlines were set up to provide information on COVID-19, including the 169 number installed by the Ministry of Health (MINSA, for its Spanish acronym) and the Government Innovation Authority (AIG, for its Spanish acronym). In turn, the Social Security system strengthened its 199 line.

Development of several **applications**:

- Automated Operational Health Response (R.O.S.A. for its Spanish acronym) to attend to medical and health-related inquiries from the public.
- Relief Assistance and Response System (S.A.R.A., for its Spanish acronym) to provide social assistance (solidarity vouchers, digital vouchers, etc.) for people affected by the pandemic.
- Individual Negative Case Notification (N.I.C.O., for its Spanish acronym) to notify people whose COVID-19 test produced a negative result, with a confirmation via WhatsApp.
- Updated Protection of Cases under Observation (P.A.C.O., for its Spanish acronym), so that law enforcement could verify compliance with at-home quarantine by those under observation due to a positive COVID-19 test result.

The development of these applications had a positive impact **on decongesting the 911 emergency line**.



3.8 Innovation experiences in the COMMUNICATIONS AREA: Fake news and disinformation

3.8.1 Costa Rica > 9-1-1 Emergency System

Accurate official information provided in a timely manner to the public via **LAC 13-22**.

Frequent official posts on the 911 Emergency System social media accounts.

Increased media presence through interviews for the purpose of reaching large numbers of households with reliable official information.

3.8.2 Ecuador > ECU 911 Integrated Security Service

Constant and consistent **use of social networks** to respond to the public.

Use of **internal communication** tools to keep employees informed and updated on decisions taken by the authorities, new protocols and operating policies, and collaboration agreements with articulated institutions and other partners

Creation of the #vinculaciónvirtualecu911 space to **maintain contact with the public** and provide information about the emergency service management model, how to report an emergency to 9-1-1, and address topics related to the pandemic, such as biosafety measures and how to combat fake news.

Publication and dissemination of **statistics** related to the health emergency and enforcement actions for those who did not comply with the measures established by COE-N to prevent the spread of the virus.

3.8.3 Honduras > 911 National Emergency System

Dissemination of official information generated by *Telemedicina* platform and specialists via the social networks of the 911 National Emergency System and national media networks.

3.8.4 Mexico > CNI

Centralization of all official pandemic information by the Health Secretariat and the Federal Government.

Dissemination of official information about 9-1-1 and COVID-19 over the **radio and the Internet**.

Sensitization of personnel so that they could answer questions from 9-1-1 service users about COVID-19.

3.8.5 Panama > SNE 911 and SUME 911

Communication team **permanently monitoring** different communication spheres and spaces. In the event of a fake news item, an **expert** on the subject was identified so that they could provide **accurate information in a timely manner**.

Use of **official channels** designated by the Ministry of Health, as this is the only official source of information on COVID-19.



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