

## Integrated Biometry Solution

# JUNAEB School Meals Program (SMP)

### Challenges

- JUNAEB's School Meals Program (SMP) sought to ensure the healthy growth of vulnerable young Chilean students.
- Guarantee accurate, efficient food deliveries to over 3 million eligible beneficiaries.
- Track food provisions and supervise food suppliers in individual schools.

### Solution

- Biometric facial/fingerprint verification equipment to accurately identify eligible program beneficiaries.
- Provide alternative system for password and RFID.
- Integrated cloud-based operational platform to manage equipment and information.
- Call center.
- Deliver 4 meals daily to 305,000 students.
- Network connectivity at over 1,500 schools across Chile.

### Results

- Correct identification of eligible SMP recipients.
- Reduced costs and loss of food provisions.
- Delivery of 1.2 million meals daily.(Dec. 2018)
- Dedicated operations center.
- National coverage.
- Successful time and resource optimization.

### Introduction

One of the key duties of Chile's National Board of Student Aid and Scholarships (JUNAEB) is to provide food for vulnerable young students. With large numbers of eligible students and limited administrative personnel, that is no easy task. In 2018, JUNAEB's School Meals Program (SMP) budget reached close to US\$110 million, with food being delivered to over 3 million students in 8,000 schools across the country.

As part of its quest to orchestrate a brighter world through tailored social value creation, NEC was keen to help customize a more functional, efficient and easily scalable school meal distribution system that would contribute to the country's long-term development.

Working together with various project stakeholders, NEC Chile offered advanced biometric identification technologies to help accurately verify and validate eligible recipients, trace correct delivery of designated supplies, minimize waste, and monitor student nutritional intake.

### Challenges

#### Accurately identifying eligible school meal beneficiaries

Administering a nationwide SMP system posed several significant challenges, starting with the safe but accurate identification of eligible beneficiaries. To date, JUNAEB paid food providers monthly based on manual certifications carried out by schools and educational facilities that suffered an estimated 10% margin of error.

With the majority of beneficiary schools located in rural areas, introducing cloud-connected technology was a vital requirement for the efficient running of the meal distribution project and consistent development of recipient schools.

There was also a pressing need to monitor children in dining rooms more closely to improve daily demand predictions and inventory management, and nurture more intelligent, efficient food supplier operations. A biometric identification solution was the best way to address these issues.

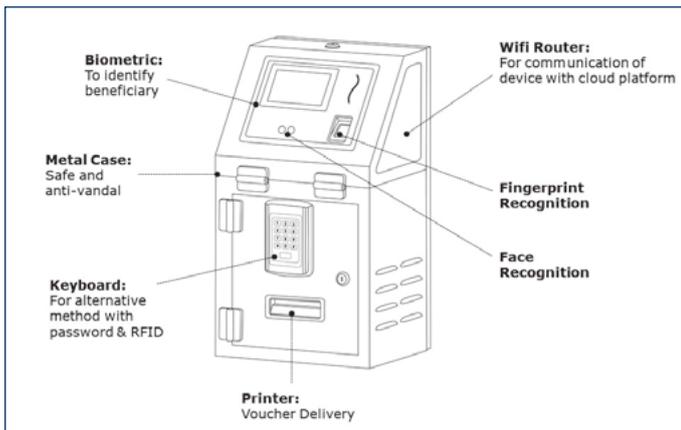


## Solution

### A biometric identification system to cover all schools

Drawing on its extensive experience as a successful integrator, NEC Chile enlisted suppliers from Asia, South America and Europe to help tailor a facial and fingerprint identification solution to improve the SMP program reach, efficiency and visibility.

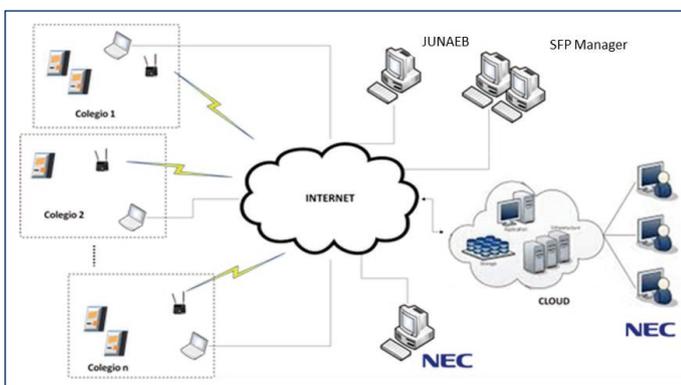
NEC developed two styles of biometric authentication equipment to suit differing school sizes and free meal distribution systems: 1) a fixed recipient verification terminal that issues a physical voucher for large schools with large numbers of recipients, and 2) a mobile solution for smaller schools and emergency backup.



SMP Biometric Verification Terminal

A central, cloud-based platform monitors and manages all installed equipment and generate reports for JUNAEB and food suppliers to help maximize the visibility of benefit distribution, the traceability of beneficiaries, the allocation of resources, and the individual nutritional value of its school meal provision.

“NEC has 100 years of experience in ICT, but this project has taught us that deploying innovative technology solutions to positively impact an environment is the way to create social value, and that co-creation is the way of the future. The more minds, the better!” explains Hervé Delhumeau, Head of Technology, NEC Chile.



SMP Management Platform

Since the project launch in 2017, NEC Chile has successfully installed 3,230 biometric identification terminals in 1,518 schools across six regions in Chile so far.

## Results

### Improved recipient traceability and food delivery service

NEC’s integrated biometric system for identifying eligible SMP program beneficiaries is already helping JUNAEB and food suppliers better control food inventory and processing to maximize resource use and ensure the nation’s most vulnerable children receive the food and nutritional balance they need.

JUNAEB is now combining accumulated data on children entering dining rooms every day with available food types to improve its menus and deliver tastier, more attractive food options.



JUNAEB’s ultimate goal is to provide healthy nutrition to promote student growth during vital school years and early life stages. NEC is proud to be a part of that goal. JUNAEB intends to accelerate the implementation of biometric verification technology

in its SMP in 2019 to cover all eligible schools.

NEC Chile’s CEO Gabriel Martinez broadens the horizon even further: “Driving this first system in the region to a successful outcome should create a new opportunity to help millions of families and students across Latin America and other emerging countries worldwide.”

The initiative has already sparked the interest of the World Food Program for potential implementation in Colombia.

## About JUNAEB

JUNAEB is a public institution created in 1964 to pinpoint biopsychosocial vulnerabilities ensuring that all children have access to necessary food resources to grow and succeed in the education system. The organization manages various services including the administration of school meal programs, health programs, and student housing.