



Sector\_ **Public Sector**  
Title\_ **The office of the comptroller general of the Republic of Chile**

**SICA Computer**

Two months ago this government organization began the testing phase of the SICA-Integrated Audit Control System, a Web application offering transversal coverage for all business processes. This begins a new phase designed to effectively deal with the control activities that affect the quality of the services this organization provides when auditing different public services.

For the **everis** Chile team of professionals, the technology partner in charge of the implementation, and Comptroller Executives, the SICA computer system will be meet the normal expectations set forth prior to the design of computer systems for one simple reason; it is a tool that is custom fit to user requirements.

**Luis Lara**  
**Head of the Comptroller General of the Republic Computer Center**

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**Jesus Sanchez**  
**Manager of the everis Chile Technology Service Unit**

*“One of the most complex technological characteristics of the product”, points out Jesus Sanchez, is that “SICA is not just a traditional web application. The inclusion of a Rich Client module which allows an auditor to upload and download data onto a central server and then, when on-line, the application updates all the new data is a sizeable challenge.”*

One of the most obvious technology achievements in recent years has been designing solutions for an ordinary user who is inexperienced in programming and systems. This is the premise that inspired use of widespread and massively consumed applications like Facebook, or search engines such as Safari or Google.

Likewise, in the world of corporate applications a system that achieves simplicity in representing business logic enjoys a greater degree of adoption by users. This also enhances the efficiency and productivity of the Executives who, in the end, validate IT investments.

In part, this feeling reflects the moment in which Republic of Chile General Comptroller officials began toying with the idea of using SICA computing - the Integrated Audit Control System - the Web tool implemented with the assistance of **everis** Chile, its technology partner. This application has been custom developed in order to offer transversal coverage for institutional business processes.

For Luis Lara, Head of the Comptroller General of the Republic Computer Center, the system represents a significant change in managing Control Activities, and a tremendous contribution to the quality of the service performed for different public services. “This system represents a fundamental pillar of the policy that requires the implementation of systems that meet national standards which the Comptroller General’s office has been promoting as part of its institutional strengthening program,” he adds.

SICA contains a strategic vision defined by management areas that includes specific auditing activities.. “To meet this need the Organization hired an external company who would identify the External Control function requirements. Then we defined a working methodology, which is linked to the quality norm standard processes used for executing audits,” said Luis Lara.

As a result of this consulting work, a technological operational and functional model was designed. “SICA computing automates all this methodology and centralizes it on a single platform, which is available using the Comptroller’s Website. Access can be gained by both nationally and regional Comptroller personnel who can participate in, monitor and manage audits in progress” added the Head of the Computer Center.

**Why is this necessary?**

From the results obtained by the consulting work carried out, a working model based on three core modules, including planning, programming, implementation and follow-up audits was designed, This represents the flow of processes which align all audits and are defined by the Comptroller Audit Methodology (MAC) and the corresponding configurations.

The platform as a whole, seeks to simplify these activities and related resources using the decentralized operation of the various control units and associated validations.



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To enable the implementation of audits through the reuse of information registered during prior periods.

To increase control and vision of Senior Management personnel with regard to audit status, resource allocation, summary or special investigation training and static and dynamic assessment and corrective activities reports.

To provide a knowledge base for improving audit execution efficiency, special investigations and summaries by using information provided by management indicators.

**Advantages**

For Luis Lara one of the more obvious benefits of this computer tool is to help focus control efforts on processes and public services of higher risk through related planning modules and audit schedules, which are based on the differing risk matrixes that characterize each Public Service.

“What is even more interesting is that each of the actors involved in the process has their own individual service related risk map which is associated with their role and which may lead to further actions,” confirms the head of the Centre.

Also, the program of activities has also been positively impacted. “Our mission is to oversee a set of programs already in place, but, at the same time, we also have the capability to absorb extraordinary elements, that are relevant to the Government - a process included in the system business model” he says.

“Today, with the Integrated System,” continued Luis Lara, “we have optimized resource management., By being able to observe service rankings, which are characterized by the type of audit, mode or subject matter, we are able to develop an Annual Operating Plan that is more aligned with this demand, with less risk.

Prior to the process computerization stage, the development of audit planning was a challenge. Today, due to the existence

of Integrated System risk matrixes, defining audit related activities such as defining the production of an auditable services ranking, identifying services having a national priority, or defining the level of risk associated with each of the organizations subject to auditing, has become a faster, accurate and flexible process.

Another advantage is the incorporation of a single methodology for the implementation of audits and special investigations, which has improved the standardization of processes, consistency and quality of audits and their results.

Furthermore, working on an information system has contributed to both work and team work, based on clearly defined roles and functionalities thereby reducing a broad range of audit activity related risks. This is possible because this system provides all the players involved with the level of observability necessary for effective execution of the decision making process.

**Technological**

In functional terms SICA is a single platform on which to perform all audit planning, programming, implementation, management and control functions which the comptroller executed for different public services.

According to Jesus Sanchez, Manager of the **everis** Chile Technology Service Unit, “From an IT point of view, the Integrated System, due to its technological characteristics, is one of the most innovative IT projects in both the Chilean public sector and in similar organizations across Latin America.”

SICA was built with open technologies and service oriented architecture, which is very well aligned with the modernization process that is driving the Chilean public sector, to promote interoperability between different institutions and platforms. “The Development Framework, in methodological and technological aspects, is based on J2EE technology and developed by **everis** Chile, but based on free products” emphasizes Jesus Sanchez.

The platform consists of two basic technological elements: SICA-WEB and SICA-BI (Business Intelligence), whose services are on-line.

SICA-WEB is the main page of the application architecture



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built on Jever and “integrated into the Agency’s Auditor portal for access through the corporate Intranet using a Single Sign-On.”

SICA-BI, is the reporting module which allows Comptroller executives to generate reports and charts with statistics designed to show SICA historical data trends, or other variables that are of interest to organization management in order to improve service quality.

It also has a third – Off-Line- component known as Rich Client. This is an application designed with a SICA-WEB functionality, that allows for running an audit without being connected to the institution’s server. “With this mode, the auditor can perform field work “offline” on their laptop and synchronize the changes made with the central database system upon returning to agency offices,” describes Luis Lara.

**Challenges**

Developing SICA with the technological conditions and business requirements set forth by the Comptroller, meant that the team of consultants from **everis** Chile would also have to digitalize all Compoller business processes, providing user safety and reliability levels with regard to the use of the services provided using this platform.

For Jesus Sanchez the capability to to develop a safe and efficient system, was achieved by designing a service-oriented architecture. The Framework on which the application was developed was constructed using this concept, which allowed for business processses to be modelled from a service synchronization point of view.. All outward facing

services, whether Web interface, integration with other systems, or downloading or uploading information from the Rich Client module is deployed under a layer of homogeneity, authentication and access management.

“From the transactional point of view there are two applications. One using a Web environment for auditors working at Comptroller facilities that have access to the internal network and another, the client-server mode, which allows you to work off-line from the central server. Both systems, however, must contain the same data, must be consistent and managed using with high level security standards and protocols. The “look and feel” should be equal so that the user will not notice the difference between working either on-line or off-line. This has added a host of complex elements to the Framework, and what makes it so different from traditional Web versions.”, he concludes.

A year and a half after implementation, SICA entered into the operational phase in October. As pointed out by Luis Lara, Head of the Comptroller General of the Republic Computer Center, pilot audits have been planned in order to enable user operation of this platform.. “Adoption at the national level, however, will be a gradual process as from next year. It is a process that will be led by audit function and accompanied by the deployment of teams across the nation,” he says.

There is a broad consensus among Comptroller Executives and **everis** Chile, its technology partner, that a system custom fit to the requirements of this institution has been implemented, thus the adoption of the same will be a success.

**everis** is a multinational company which collaborates with the principal companies in all activity sectors, developing long-term alliances, in order to assist them in achieving their business objectives, through knowledge, talent and information technologies.