## BANCO CENTRAL DE COSTA RICA



## COSTA RICA: EXPORTS OF SERVICES OVER INFORMATION AND COMMUNICATION TECHNOLOGY NETWORKS (ICT)

## Data of 2022

Prepared by:

División Gestión de Información Departamento de Estadística Macroeconómica Área de Estadísticas del Sector Externo.

Responsible officials:

Karolina Rodríguez Alfaro Rigoberto Torres Mora

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# **EXECUTIVE OVERVIEW**

In 2023, the Banco Central de Costa Rica (BCCR) conducted the measurement of exports of services channeled through technology, information and communication networks (ICT) for 2022. Since the first quantification, carried out in 2017 with 2016 data, this activity was incorporated into the Plan Anual Operativo (PAO) and is part of the Fortalecimiento de la Estadística Macroeconómica (FEM) project.

This exercise gives continuity to the initiative of the United Nations Conference on Trade and Development (UNCTAD), which in 2016 invited a group of four countries (Thailand, Egypt, India and Costa Rica) to develop a pilot survey to measure the export of services channeled via networks (ICT).

This study makes it possible to determine the structure of services delivered through technology, information and communication networks (ICT), with greater detail than that provided in the international accounts.

Since services exported under this modality have experienced a special dynamism with respect to other means of delivery, they represent a challenge for the compilers of statistics in terms of adequate measurement and accounting in the macroeconomic accounts. In this context, it is important to provide more timely and detailed indicators, expanding the tools available for the formulation of the country's public and economic policy.



## ACKNOWLEDGMENTS

We are grateful for the professional support of Scarlett Fondeur and Torbjörn Fredriksson, staff members of the United Nations Conference on Trade and Development (UNCTAD) and consultant Peter Bøegh Nielsen for their methodological recommendations in the development of this research.

To the working team of the United Nations Conference on Trade and Development (UNCTAD) and the World Trade Organization (WTO) based in Geneva, Switzerland, and to the government sponsors of this initiative.

This project had the support of the authorities of Banco Central de Rica (BCCR) and the colaboration of Ministerio de Comercio Exterior (COMEX), Promotora de Comercio Exterior de Costa Rica (PROCOMER), Coalición Costarricense de Iniciativas de Desarrollo (CINDE) and Cámara Costarricense de Tecnologías de Información y Comunicación (CAMTIC).

Special thanks to the private sector companies and public entities that provided information that contributed to the achievement of the objective of this research. The statistical input derived from the study will undoubtedly contribute to the formulation, follow-up and strengthening of the country's public and economic policy.



# GLOSSARY

BCCR CAMTIC ISIC4	Banco Central de Costa Rica Cámara de Tecnologías de Información y Comunicación International Standard Industrial Classification of All Economic Activities. Rev 4.
CINDE	Coalición Costarricense de Iniciativas de Desarrollo
COMEX	Ministerio de Comercio Exterior
FEM	Fortalecimiento de la Estadística Macroeconómica
OMC	Organización Mundial de Comercio
PAO	Plan Anual Operativo
PROCOMER	Promotora de Comercio Exterior
ICT	Technology, information and communication
UNCTAD	United Nations Conference on Trade and Development

# **1. GENERAL ISSUES**

### • Services exports:

Sales of services from residents to non-residents during 2022 through the different modes of supply.

### • Modes of supply:

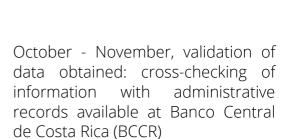
<b>Mode 1</b> Services channeled remotely to customers abroad via Internet, telephone or e-mail (cross-border offer).	<b>Mode 2</b> Services provided to non-residents who are temporarily in the country (consumption abroad).	<b>Mode 3</b> Establishment of a commercial presence in a foreign country to supply services to non-residents (commercial presence).	
• Types	of services includ	ed in the survey	y:
Telecomm serv		Information services	License services
Computer (includes se	services oftware)	Insurance and financial services	Engineering research and development services
Marketing serv	and sales ices	Management, administration and back office services	Education and training services

#### Source: Banco Central de Costa Rica (BCCR).



April-September period, survey application: telephone calls and emails sent to the managers of each statistical unit.

Close contact with the informants in order to obtain information of interest for the study.







December 2023, disclosure and presentation of results to the general public.



















# 3. MAIN RESULTS 2022

## 3.1 Companies included in the study

## Table 3.1Number of companies included in the study

Size	Sample	Responses	Estimated
Micro (1)	20	9	670
Small (2)	26	14	78
Medium (3)	35	20	145
Large (4)	139	126	333
Total	220	169	1,226

The statistical sample for this research included 220 companies, of which 169 responded to the survey.

In addition, a total of 1,226 organizations with a high probability of providing services through a technological network were estimated.

Finally, the study covered 1,395 companies.

Source: Banco Central de Costa Rica (BCCR).

### Table 3.2 Number of companies included in the study, by economic activity

Economic activity	N° Enterprises	N° CIIU4	Relative share (%)
Agriculture	33	1	2
Commerce	125	5	9
Manufacturing Industry	164	22	12
Services	1,073	38	77
Total	1,395	66	100

The research incorporated companies from different economic activities.

Service activities represented the largest number of organizations.





# 3.2 Companies included in the study that sell services through ICT networks

### Table 3.3 Sales of services through ICT networks, by size and participation

Size	N° enterprises	ICT Sales USD Mill.	Relative share (%)
Micro (1)	524	54	1
Small (2)	58	49	1
Medium (3)	129	466	8
Large (4)	288	4,970	90
Total	999	5,539	100

In 2022, the value of services exports channeled through technological networks reached USD 5,539 million (8% of GDP). Large companies canalized 90% (Size 4).

Free Zone Regime companies accounted for 88% of total sales of services through ICT networks in 2022.

Source: Banco Central de Costa Rica (BCCR).

Table 3.4 Sales of services through ICT networks, by economic activity

Economic activity	N° enterprises	ICT Sales USD Mill.	Relative share (%)
Agriculture	0	0	0
Commerce	124	291	5
Manufacturing Industry	20	206	4
Services	855	5,042	91
Total	999	5,539	100

By economic activity, services contributed 91% of sales channeled through technology, information and communication networks (ICT).

The other activities with operations of this type were commerce and manufacturing.





# 3.3 Export of services through ICT networks, by service consulted

The following statistical table summarizes the data corresponding to the 999 companies exporting one of the 9 services consulted in the form.

Management, administration and back office is the most representative service, followed by IT and software.

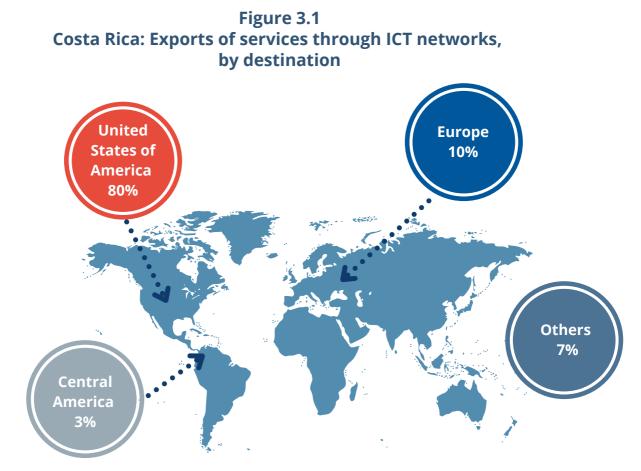
Table 3.5 Costa Rica: Exports of services through ICT networks, by type of service consulted Mill. USD				
Type of service	ICT sales USD Mill.	Relative share (%)		

Type of service	USD Mill.	share (%)
Telecommunications	29	0.5
Computer	1,271	22.9
Marketing and sales	108	2.0
Information	17	0.3
Insurance and financial	68	1.2
Management, administration and back office	3,794	68.5
License	6	0.1
Engineering research and development	241	4.4
Education and training	5	0.1
TOTAL	5,539	100



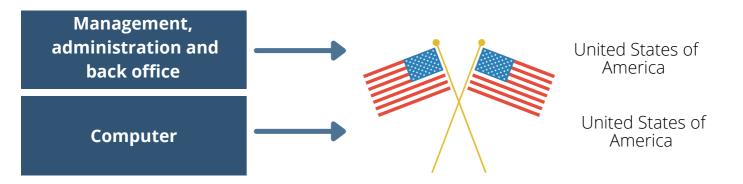
## 3.4 Export of services through ICT networks by destination

Total sales canalized through ICT networks were mainly directed to supply the markets of the United States and Europe; these destinations accounted for 90% of the amount exported in 2022.



Source: Banco Central de Costa Rica (BCCR).

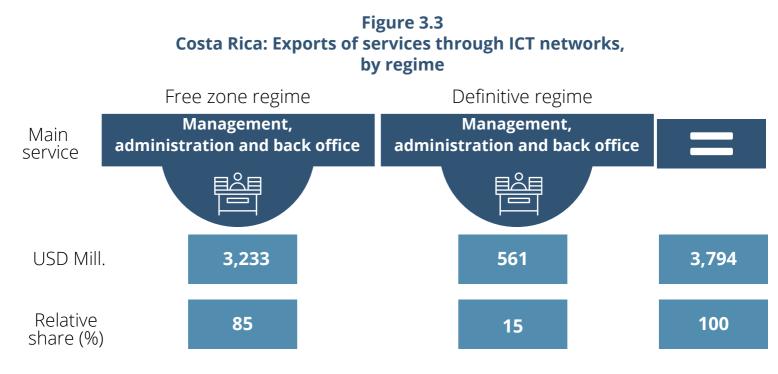
Figure 3.2 Costa Rica: Destination of ICT exports according to the most representative services.



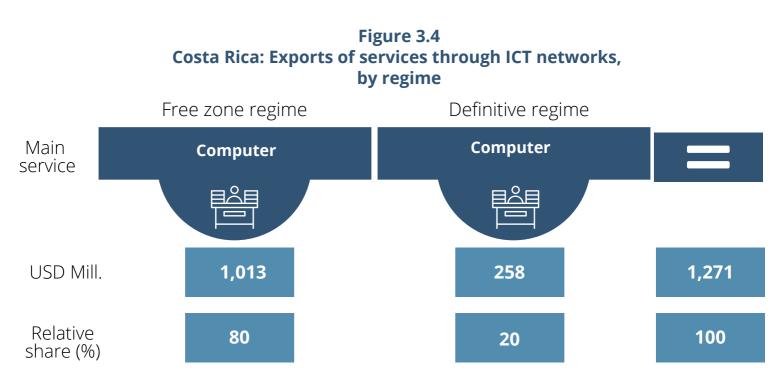


## 3.5 Export of services through ICT networks by regime

Enterprises under the special Free Trade Zone Regime accounted for 88% of the total amount of services exported through technology, information and communication networks (ICT). Figure 3.3 and 3.4 shows the distribution of service sales by type of regime. The services sales with the highest growth in both groups are Administrative and Auxiliary Services Offices and Computer services.



Source: Banco Central de Costa Rica (BCCR).



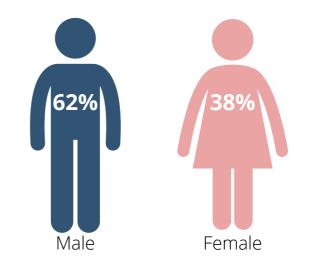


# 3.6 Job opportunities provided by service exporting companies through ICT networks

Regarding the characteristics of employment generated by ICT companies, it was found that these organizations provided employment opportunities to 162,737 people, equivalent to 6.6% of the total employment in the country.

Out of every 100 jobs provided by this group of organizations, 38 jobs are held by women.

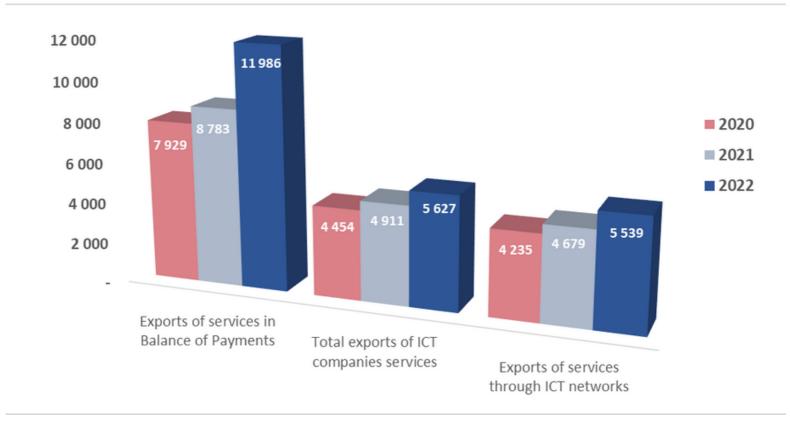
### Figure 3.5 Costa Rica: Job opportunities provided by exporting companies through ICTs by gender.





## **4. CONCLUSIONS**

- ICT services exports accounted for 46.2% of total services exports in 2022.
- ICT services sales are concentrated in large companies and in two types of transactions with non-residents: Administration and back offices and Computer and software, which accounted for 91.4% of total exports. However, there are a significant number of micro and small companies involved in these activities.
- In the ICT services export activities, the contribution of companies under the special Free Trade Zone regime (88% of the total) stood out.
- Companies that channel sales of ICT services increased job opportunities for both genders in 2022.



### Graph 4.1 Costa Rica: Comparison of total service export amounts



- The value of ICT services exports accounted for 8% of GDP in 2022; a higher ratio than those observed in 2020 and 2021 of 6.8% and 7.2%, respectively.
- In general, sales of services channeled via ICT networks presented growth in the 2020 2022 triennium, despite the environment characterized by the global effects associated with COVID-19.

#### Table 4.1 Costa Rica: Evolution of total services exports channeled through ICT networks USD Mill.

Type of services	2020	2021	2022
Telecommunicatios	28	30	29
Computer (includes software)	880	1,009	1,271
Marketing and sales	85	107	108
Information	11	15	17
Insurance and financial	72	68	68
Management, administration and back office	2,971	3,298	3,794
License	3	4	6
Engineering research and development	180	142	241
Education and training	5	6	5
TOTAL	4,235	4,679	5,539

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