

Consultant - CEPAL

data exchange

### OUTLINE

- Background and trade data
- Analyzed documents and Interviews
- Observed gaps
- Mitigation ideas.





#### BACKGROUND

Official name: República de Costa Rica

Area: 51.000 Km2

Population: 4.480.000

GDP(PPP) per capita: 14.344 U\$S (2013 IMF data).

Frontiers: 516 Km

Coastline: 1412 Km

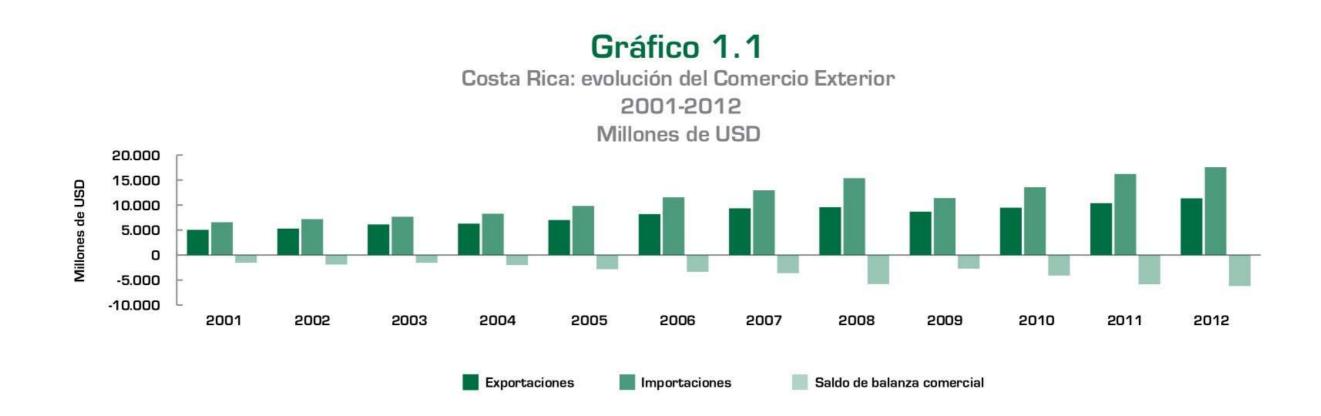
Official language: Spanish

- According to Happy Planet index it is the happiest country in the world
- One of the oldest democracies in Latin America with no army.
- Tourism is a major source of income (beaches and biodiversity)

### TRADE DATA

Cuadro 1.1

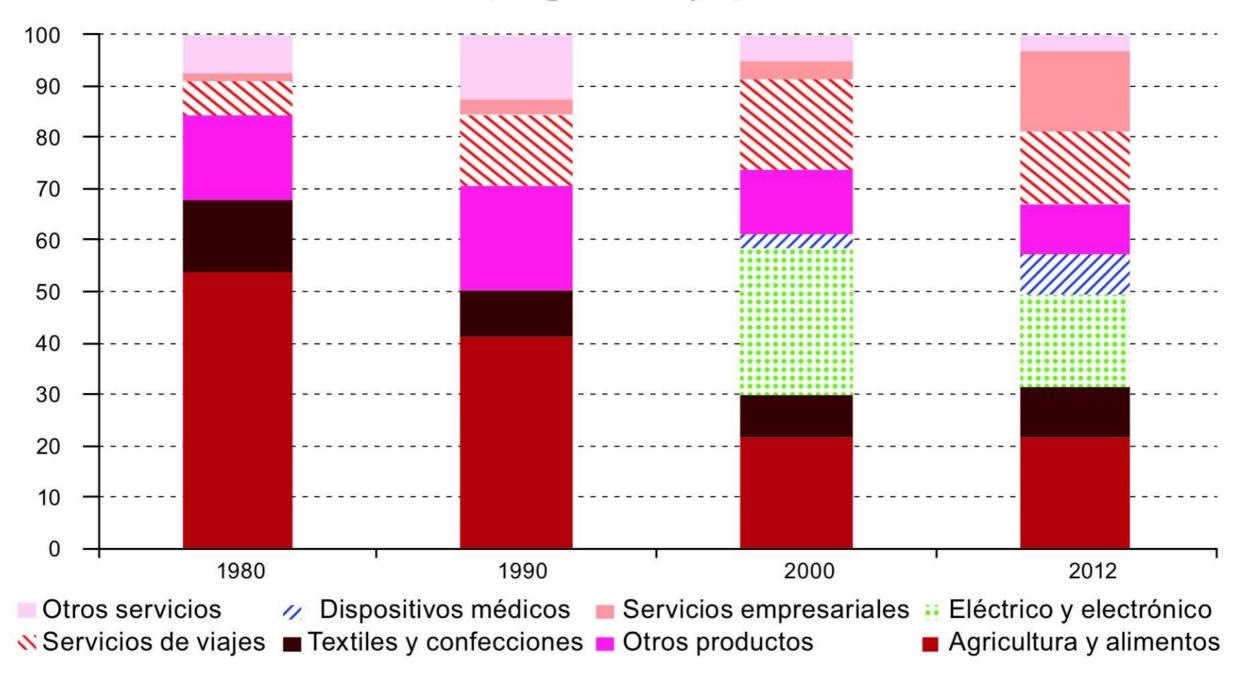
Costa Rica: evolución del comercio exterior 2001-2012 Millones de USD												
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Exportaciones	5.044,5	5.294,4	6.121,1	6.282,1	7.004,8	8.195,6	9.343,2	9.569,8	8.675,6	9.471,2	10.376,0	11.343,3
Importaciones	6.568,6	7.187,9	7.663,2	8.268,0	9.823,6	11.548,1	12.952,4	15.371,6	11.394,5	13.569,6	16.215,9	17.572,1
Saldo de balanza comercial	-1.524,1	-1.893,5	-1.542,0	-1.985,9	-2.818,9	-3.352,5	-3.609,2	-5.801,8	-2.718,9	-4.098,4	-5.840,0	-6.228,8
Comercio total	11.613,2	12.482,3	13.784,3	14.550,1	16.828,4	19.743,7	22.295,6	24.941,4	20.070,2	23.040,8	26.591,9	28.915,4



Fuente: PROCOMER y Banco Central de Costa Rica.

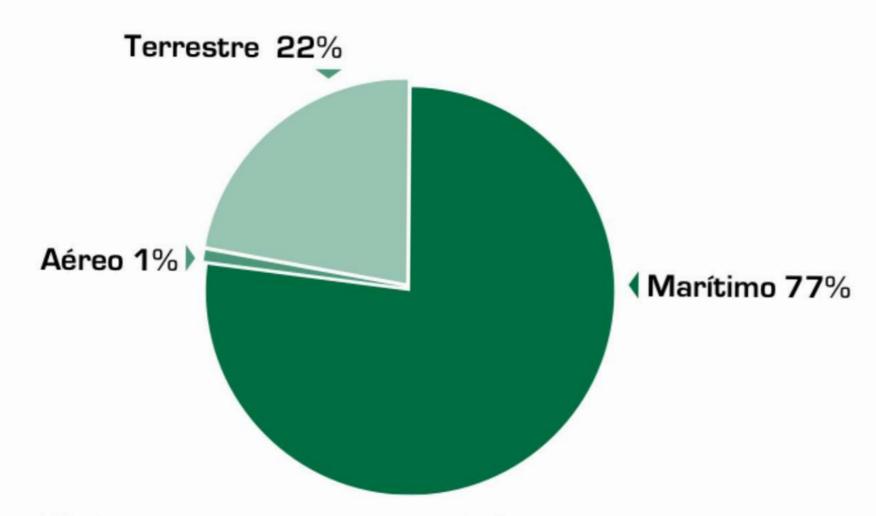
#### COSTA RICA: COMPOSICIÓN DE LAS EXPORTACIONES, 1980 A 2012

(En porcentajes)



#### Gráfico 11.1

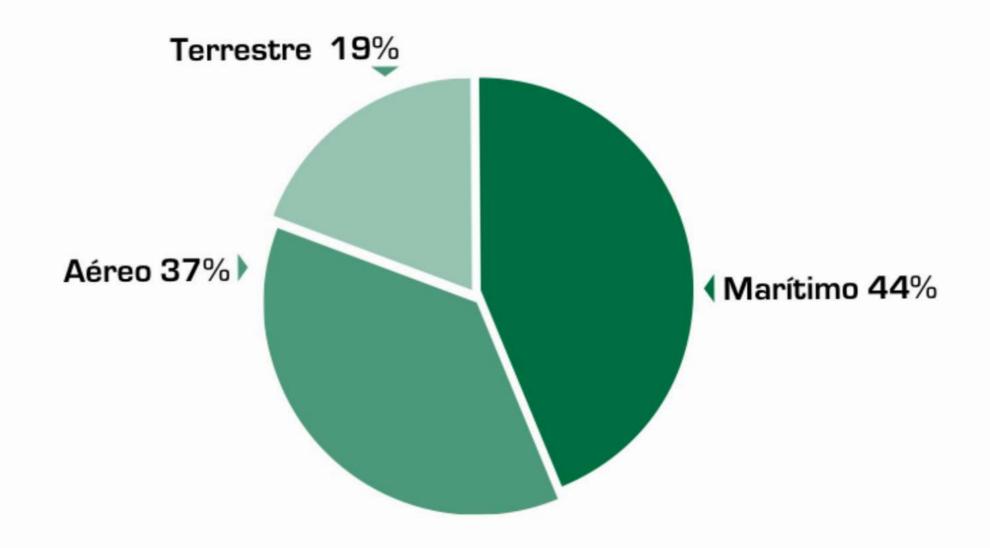
Costa Rica: volumen de las exportaciones según medio de transporte, 2012\*



<sup>\*</sup> El valor y peso incluye solo exportaciones clasificadas según medio de transporte. Fuente: PROCOMER

#### Gráfico 11.2

Costa Rica: valor de las exportaciones según medio de transporte, 2012\*



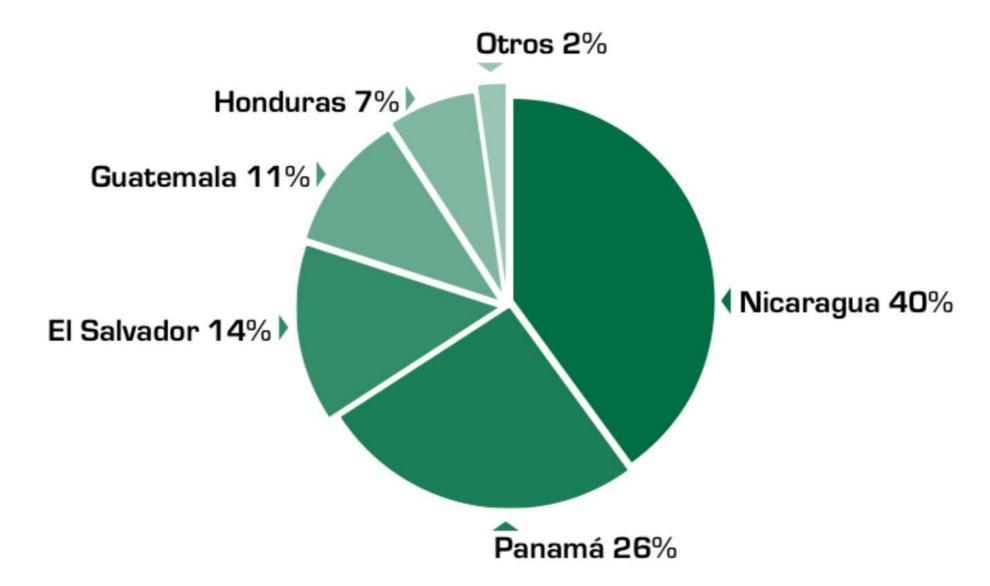
<sup>\*</sup> El valor y peso incluye solo exportaciones clasificadas según medio de transporte. Fuente: PROCOMER







#### Costa Rica: volumen de exportaciones terrestres según región de destino, 2012 3



<sup>\*\*</sup> El valor y peso incluye solo exportaciones clasificadas según medio de transporte. Fuente: PROCOMER.

#### ANALYZED DOCUMENTS

- General Customs Law (Ley General de Aduanas) (1996 + updates)
- Regulation of General Customs Law (Regulacion Ley General de Aduanas)
   (last update 2009)
- Uniform Central American Custom Code CAUCA III (Codigo Aduanero Uniforme Centroamericano) (2002)
- CAUCA Regulation RECAUCA (Reglamento de CAUCA) (2002)
- Digital Signature Law (Ley de firma Digital) (2005)
- International land transport regulation
- Work Plan (Jul-Dec 2014) Central American Secretariat for Economic Integration (SIECA)
- Presentation on trade Facilitation (SIECA)

#### INTERVIEWS

- Deputy Minister of Finance
- Director of General Customs Service
- Technical and Procedures
- Norms (Legal)
- Planning
- Risk Management
- Control
- International Relations
- IT: Director of Strategic Projects
- IT: Custom Systems support and development manager



## CUSTOM IT SYSTEM (TICA) Characteristics



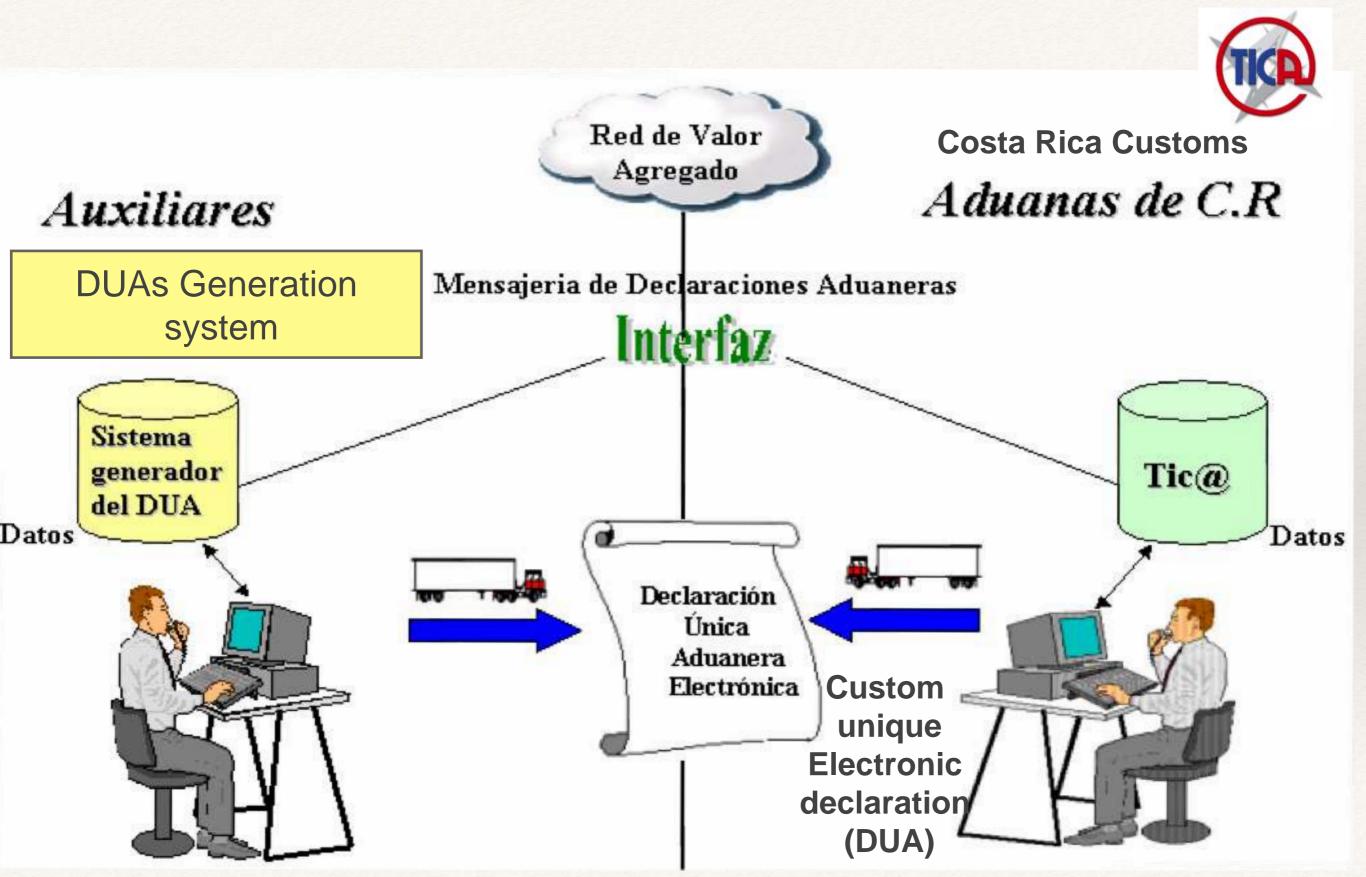
- Custom unified declaration electronic form (Declaracion unica aduanera - DUA)
- Automated Custom processes
- Autodetermination and electronic payment
- Centralized database where all operations are registered
- Integrated risk analysis module
- Electronic connectivity with public and private institutions
- Paperless custom

## CUSTOM IT SYSTEM (TICA) Main actors



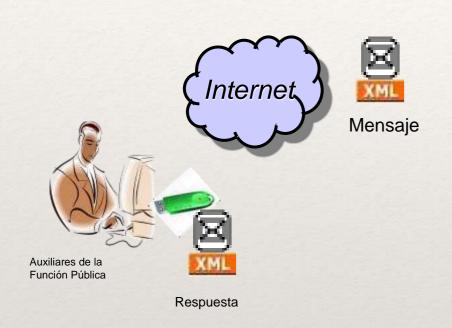
- Customs employees according to their function
- Custom auxiliaries (custom agencies, deposits, maritime, aerial and land transport companies, courier companies, consolidators)
- Port and airport authorities
- Government ministries that issue authorizations (i.e.: health, security, agriculture, etc)
- Payment gateways and services (SINPE) "Sistema interbancario de negociación y pagos electrónicos"

#### CUSTOM DECLARATIONS MESSAGING

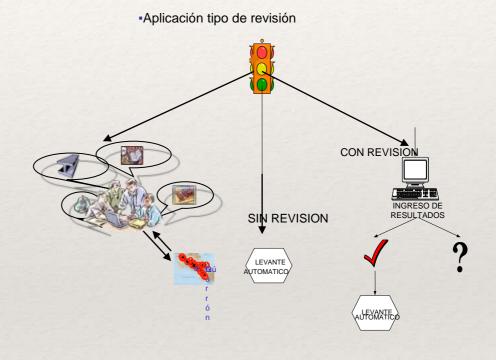




### **Functional Schema**

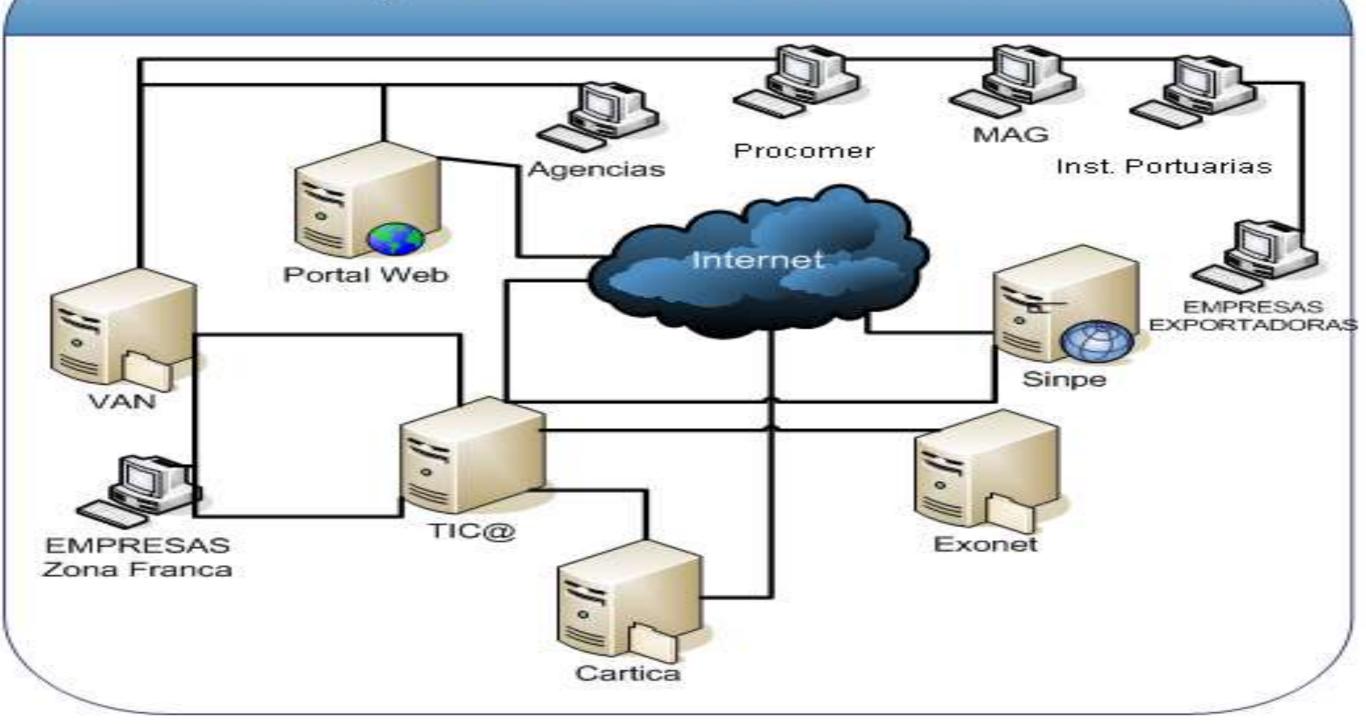






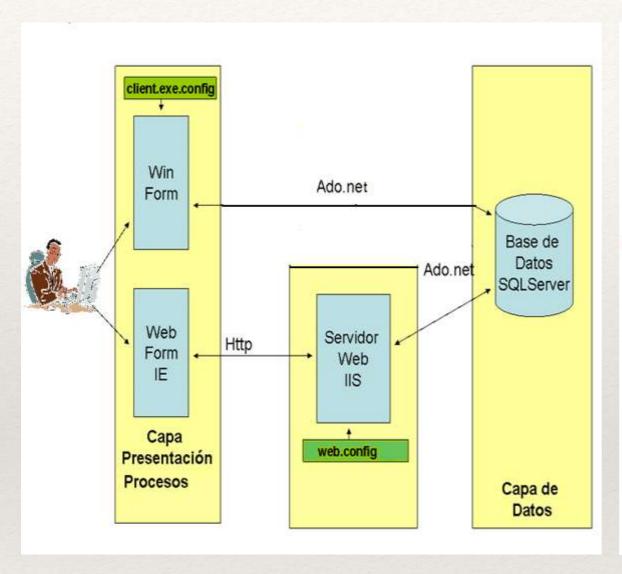


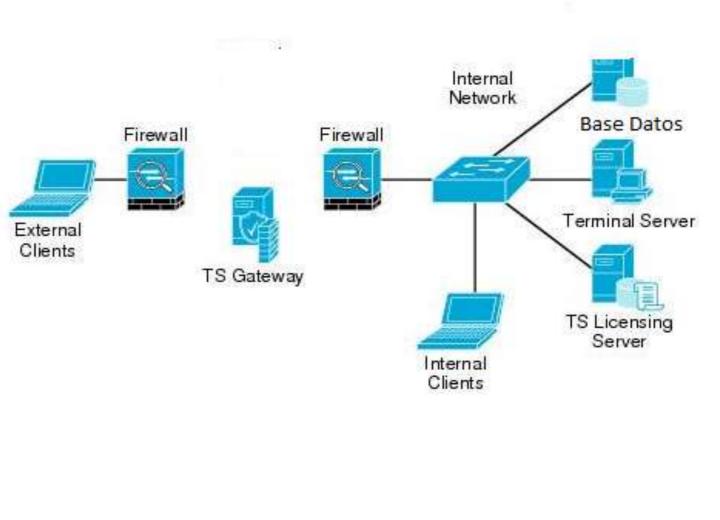
#### Aduanas - Diagrama de Relación entre Sistemas e Instituciones

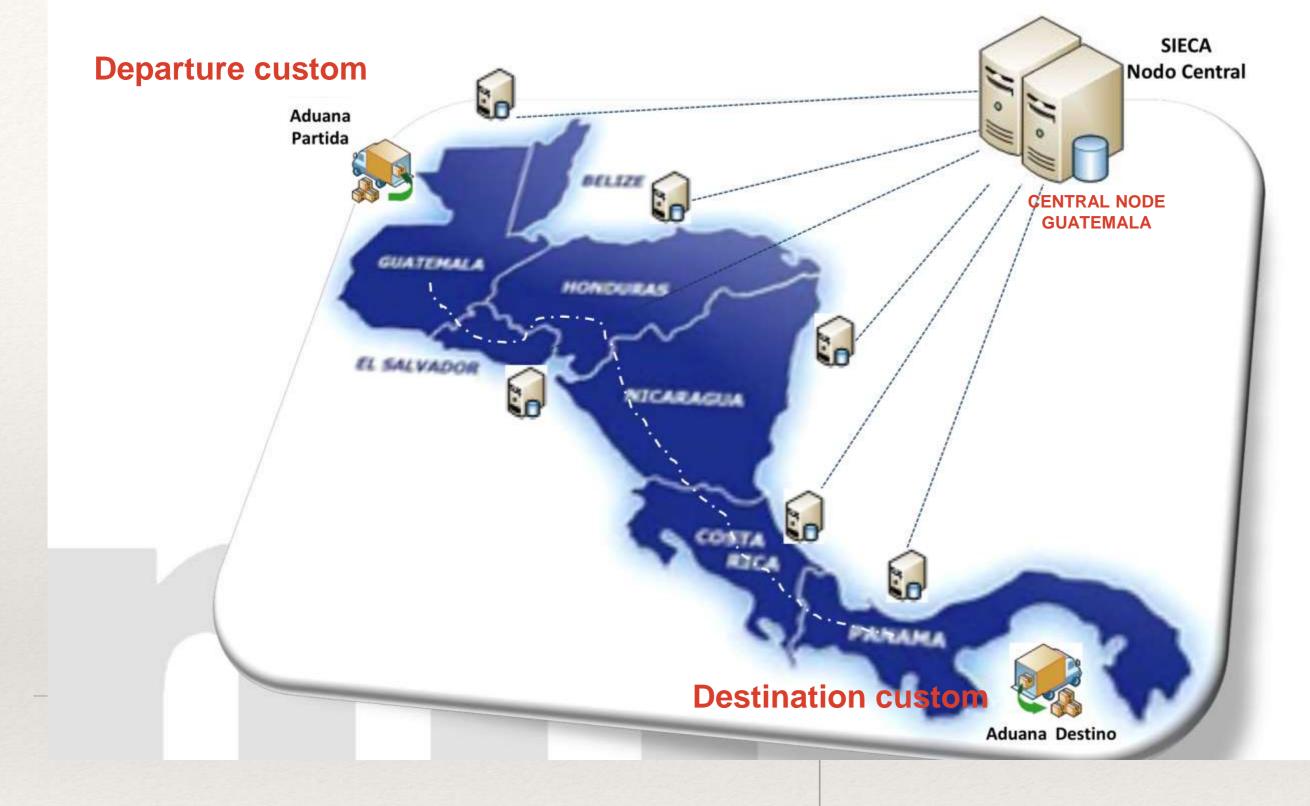


## SYSTEM ARCHITECTURE (\*\*\*)









## TRÁNSITO INTERNACIONAL DE MERCANCÍAS (TIM)

IT system common to Central American countries used to monitor international transits

## GAPS (Legal)

- There is no agreement with other countries to exchange and share risk data in Central America. Information is exchanged only on a case by case basis.
- Costa Rica has not signed CAUCA IV (it has signed version III).
   CAUCA IV clearly states recognition of electronically issued documents by Central American countries
- Electronic documents from other countries need to be validated and certified by certifier approved by the Ministry of Technology.
   At present time the unique certifier in Costa Rica is the central bank
- In TICA system agents use a token as a digital signature, but not for authentication

# GAPS (IT Systems and infrastructure)

- \* TIM Central American system is not supported 7x24.

  This poses difficulties to exchange information between customs when something goes wrong, mainly on weekends.
- An agreed list of improvements to TIM system is not developed yet. Some countries do not close transits leaving open transactions in TICA
- TICA databases are not compliant with WCO data model
- TICA is not receiving Electronic Invoices. There is an intention to develop this functionality

# GAPS (IT Systems and infrastructure)

- Risks in the infrastructure and operation of TICA system. Even though The Costa Rican Information Management area is conducting a plan that is reducing these risks, it needs to be continued and supported
- Hardware and secure system operation: movement of the primary system to a tier 3 data center (core servers have already been moved). Peripheral servers under acquisition and installation process
- A gap analysis between the TICA system functionality and the laws and regulations has been conducted. The result was that 80% is covered by the present system. A meeting between IT and Custom management to determine priorities and resources needed to develop improvements. Resource should be added if needed
- TICA System (developed under GENEXUS platform) is running under an old version

# GAPS (IT Systems and infrastructure)

- Some tasks, important for C2C information exchange are not accomplished because of shortage of personnel and/or technology implemented
- The receiving of invoices as scanned image does not prevent the possibility of altering original invoice values
- The implementation of DUCA project (Unique Declaration for Central America) was committed for December 2014, but the work at Costa Rica has not started yet
- Related to risk management and audit data analysis, the corresponding departments lack training in techniques to analyze big data (Data Marts, Business Intelligence)

#### MITIGATION IDEAS

- Train local personnel and conduct an assesement to size the effort needed to adapt TICA to WCO data model so as to facilitate information exchange between customs
- Train Customs and IT selected personnel on best practices for C2C information exchange in other regions of the world.
- Continue giving support from the upper management to complete the hardware and infrastructure upgrade plan partially completed to secure TICA operation
- Implement the functional upgrading to TICA system to guarantee compliance with laws and regulations.
- Conduct an assessment to determine, if any, single points of failure of TICA, TIM and its interface

#### MITIGATION IDEAS

- Develop the TICA and TIM interconnectivity to asses risks for international transit
- Conduct a study to determine optimum human resources staffing depending on the technology available for border customs to have no more and not less personnel than necessary to guarantee all the tasks are accomplished, including C2C information exchange
- Adapt the systems to receive Electronic invoices from vendors outside Costa Rica. Today only a scanned image of the invoice is attached to the system. This will minimize the possibility of changing the invoices value.

#### MITIGATION IDEAS

- Related to risk management data analysis develop a database accessible by TIM system and the custom authorities that can be populated by the national custom systems.
- Data: date, exporter, value, custom classification, number of pieces, weight, etc

### CONCLUSIONS

- Costa Rican authorities and users have experience with the use of centralized automated Custom Systems since several years ago.
- There are strong trade relations between Central American countries
- There are some legal gaps ,but neither of them seem too complex to be solved. There is room to promote the C2C information exchange
- Costa Rica needs to improve its IT custom system and infrastructure so as to comply with laws and regulations and provide a service level in accordance with the growing demands of international commerce with an acceptable risk level.

### CONCLUSIONS

- There is an institutional (SIECA) and information system (TIM) platform interrelated with Costa Rica Custom system, over which C2C information exchange can grow.
- There is a team of people with years of knowledge and experience about customs and IT related to customs. Training them in the best practices on processes and technologies is crucial to increase the information exchange between customs
- It is necessary to coordinate possible actions with other agencies that promote the same goals to avoid duplication.
- Taking into account the aforementioned conclusions Costa Rica is an excellent candidate in America to be nominated as a pilot country for this project in 2015



## Questions?