



*“Scientific Laboratory of the
Dominican Republic Customs,
Social Impact”*



WORLD CUSTOMS ORGANIZATION



Customs Administration of The
Netherlands
Tax and Customs Administration

5th
**WCO TECHNOLOGY
INNOVATION FORUM**

Pushing Boundaries, Changing Horizons

26 - 29 October 2015 · Rotterdam · The Netherlands

MISSION

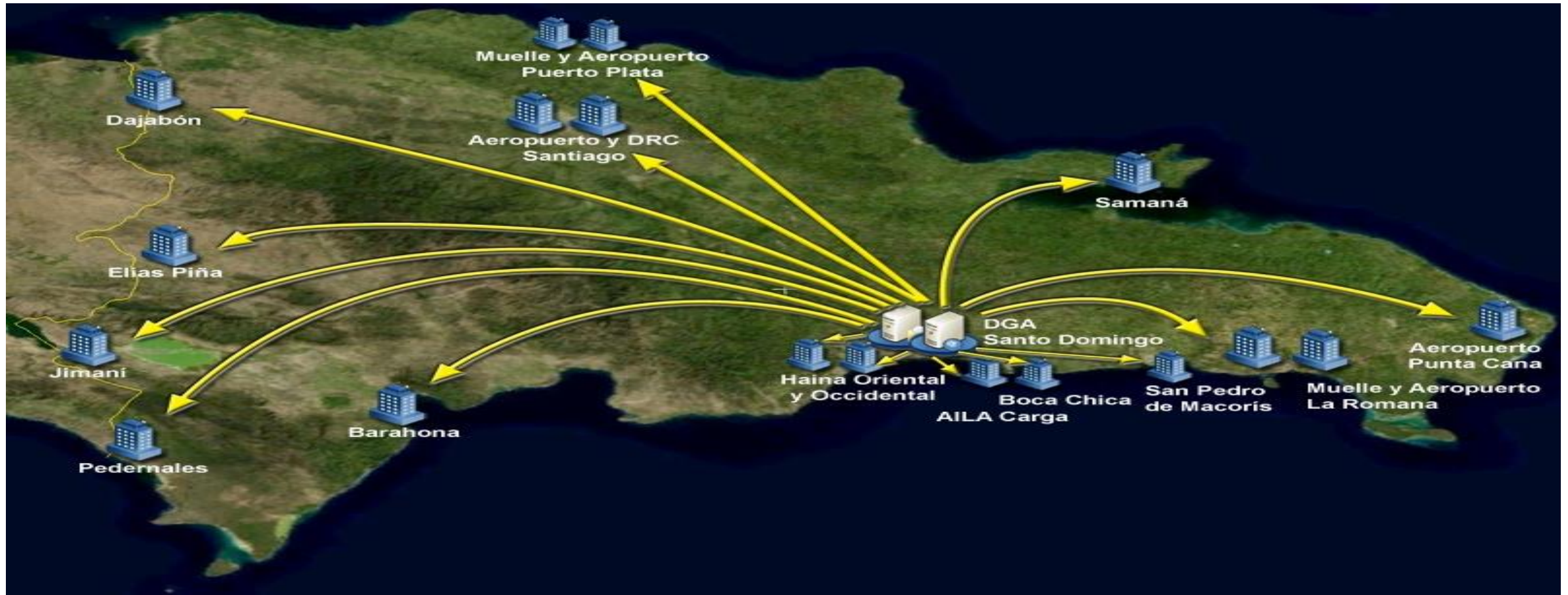
Facilitate and control trade in the Dominican Republic with the rest of the world, taking as a basis the efficiency and transparency of customs processes, according to the best international practices of customs administrations, control of tax evasion, illicit trade, the strengthening of national security and the protection of health and environment.

VISION

Be recognized as an institution of modern and efficient service at the national and international level, formed by a team of honest people who make the Mission of the institution, a transparent, expeditious and systematic process that contributes to the sustainable development and competitiveness of the nation



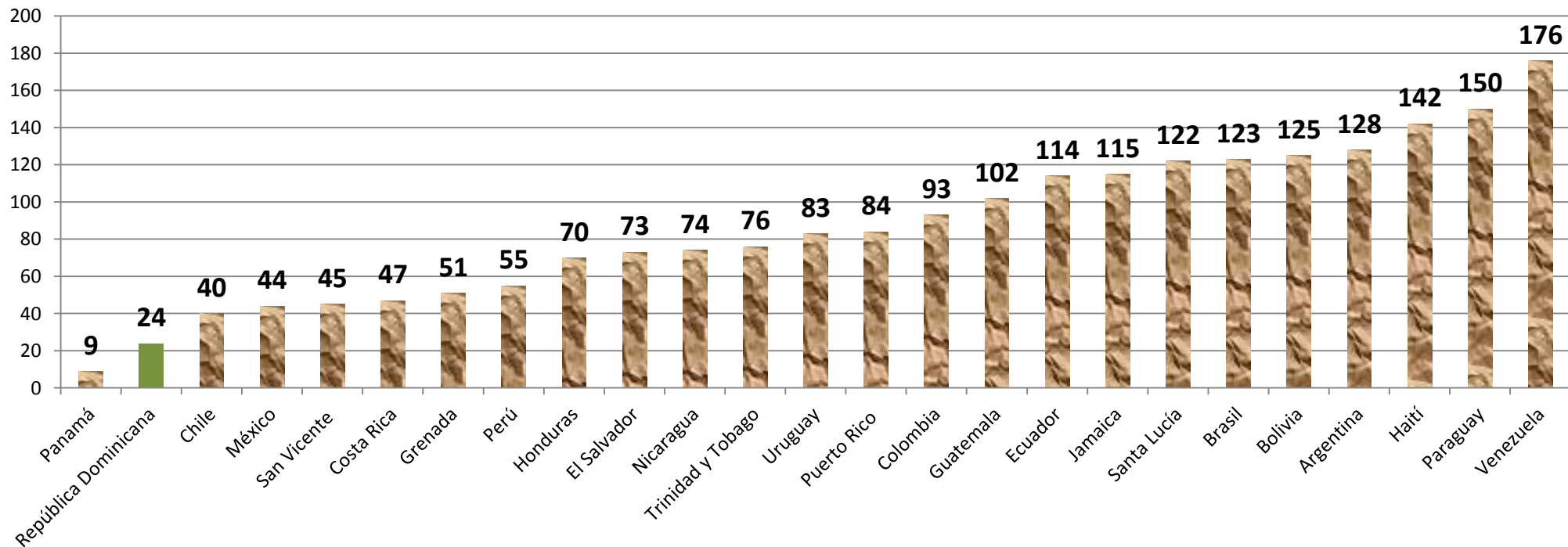
Increasing connectivity throughout the national territory: Port– Airport – Step Border – Depot – Free Zone, other official and private entities



Regional Position

In the region, the Dominican Republic is considered the 2nd economy with better results in the area of cross-border trade

Cross-border trade ranking of Latin American countries

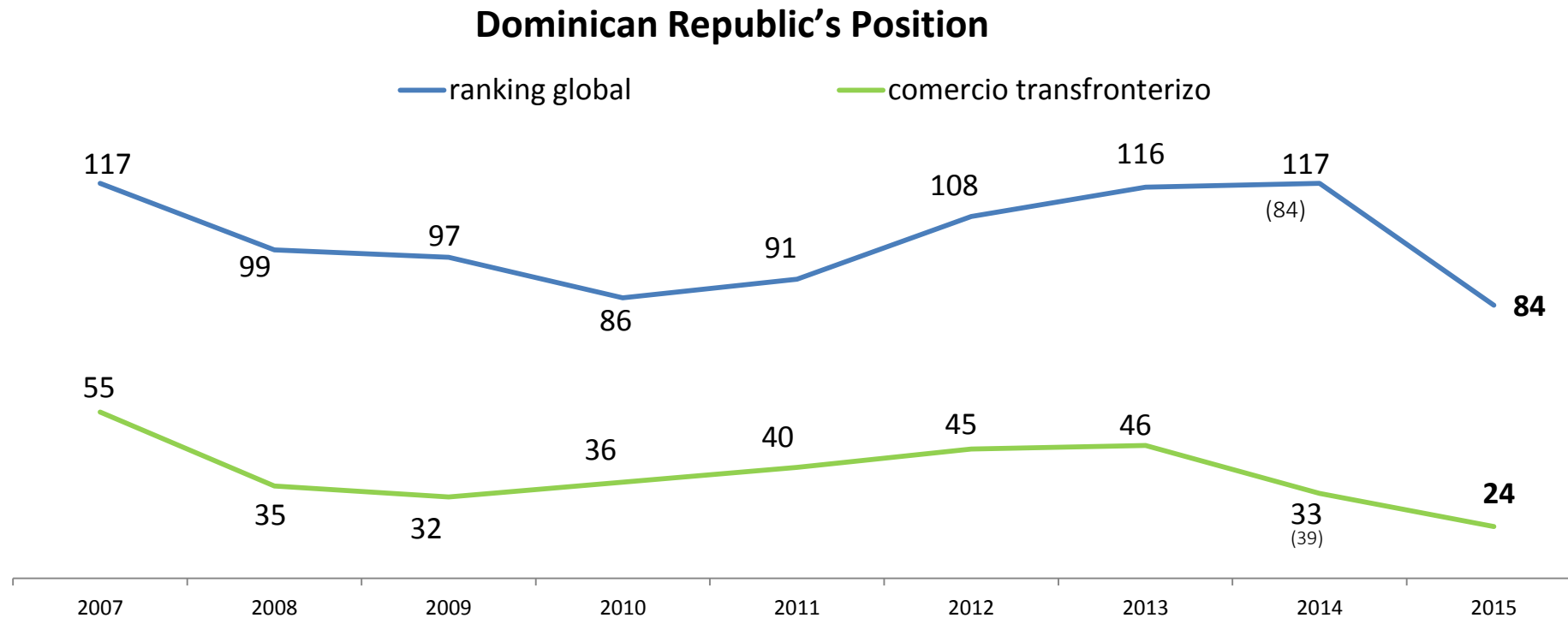


The lower the number, the better the position.

Source: World Bank

Global Position

In 2015 the Dominican economy is placed in position 84 as it relates to making business move forward, whereas with regard to Cross-Border Trade it improved 9 positions (or 15) located in the position 24 of the World.



The lower the number, the better the position.

The observed increase in the overall ranking from 2012 is due to the incorporation of indicators of the electricity sector.

Source: World Bank



The Scientific Laboratory DR Customs

Science and Technology for Foreign Trade of the Dominican Republic



Scientific Laboratory



The Scientific Laboratory of DR-Customs was designed to serve the technical and control needs of Direction General de Customs and the General Community (academic, scientific, commercial, industrial and business) of our country and support specific actions of the government public entities.

At the same time, the Scientific Laboratory will be at the service of the CU in that region, based on existing cooperation agreements.

Technology infrastructure of the Lab



Atomic absorption spectroscopy (AAS)



Spectroscopy ICP- MS



Portable Analyzer Fuel



Plasma Emission spectrometry (ICP- OES)



Electron Microscope



Spectroscopy
Infrared

Technology infrastructure of the Lab



FT -IR microscope



Chromatograph GC -MS



Chromatograph HPLC -MS-TOF



Spectrophotometer Ultra Violet (UV / VIS / NIR)



Chromatograph GC -FID - SCD

Supporting Instruments

for sample preparation



TAMICES VIBRATORIOS



MICROMOLINOS



PLATOS CALENTADORES



BALANZAS ANALÍTICAS



CENTRÍFUGAS



METROS DE pH



REFRIGERADORES DE ALTO RENDIMIENTO



PURIFICADOR DE AGUA HPLC



HORNO DE SECADO



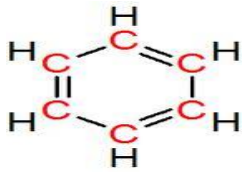
Microondas

Services Offered in the Lab



Analysis of Matrices:

- Waters, juices, soft drinks, alcoholic beverages, food, minerals, metal parts, medicines, soil, body fluids, blood, fuels, oils, organic compounds.



Measurement parameters related with hydrocarbons:

- Cetane, benzene, metals, xylene, ethyl benzene, toluene, sulfur, aromatics, oxygenates, hydrogen sulfide, hydrogen, light hydrocarbons, simulated distillation and distillation point, humidity, cloud point, flash point, point flow, density, viscosity, lubricity.



Characterization of organic substances:

- medicine, nutraceuticals, solvents, lubricants, dyes, preservatives, additives, drugs, oil, raw materials, polymers, textiles, natural and synthetic fibers, food, paintings, biological tests, counterfeit banknotes, forensics, pesticides, fuel, alcohol, vitamins, proteins, amino acids, carbohydrates, agricultural products, lipids and polymers.

Another analyzes and studies:

- Characterization of materials, human skin and carbon nanotubes, quality testing of optical filters, directional reflectance measurements on highly reflective coatings, simple method for measuring the energy band gap of TiO₂ in powder form, calculating SPF values sunscreen measuring absorbance and refractive index of thin films, high absorbance and scanning resolution, reflectance of photovoltaic components, quantification of transition metal ions and organic compounds conjugates, analysis of metals, minerals, electronics, microbiology, molecular biology, biological research.



Technicians/Employees

Specialty	Quantity	Grade
Organic Chemistry	1	Doctor (PhD)
Physical	2	Doctor (PhD)
		Master (MSc)
Chemistry	2	Master (MSc)
	4	Graduate
	1	Master (Thesis)
	1	Master (in progress)
Renewable Energy	1	Master (MSc)

Sample Management

Process for taking samples.

Establishing chain of custody.

Laboratory receives the samples: Form of custody at the specified date, customer, origin of it, and others relevant data.

Storage Policies (lockers/ refrigerators, etc.)

The results will take between 2 and 7 business days to get the verification or results. However, some analysis only will take minutes to deliver the results.

These results are delivered to the customer by mail, or in person (as requested).

Institutional Cooperation Agreements

Instituto Tecnológico de Santo Domingo (INTEC)

- Joint research activities, Intec students will have access to the laboratory of DGA, donation of obsolete equipment to Intec, Scholarship programs, internship programs.

Ministry of Agriculture (MA)

- Analysis of imported and exported products for determinates fulfillment of the phytosanitary rules.

The National Institute for the Protection of Consumer Rights(Pro consumidor)

- Analysis aimed at protecting the health and safety of consumers. Support researches to identify defective, altered, hazardous or banned products.

Ministry of Public Health

- When the good lacks of formalities and there is doubt about the origin of the source or counterfeit drugs. Both organizations can make a joint effort to alert about any viruses, diseases or epidemics. That will guarantee better control in the airports or border points.

Ministry of Environment and Natural Resources

- This agreement will help to ensure the national security, in environmental water, soil and air, ensuring control for no biodegradable substances and materials and / or international hazardous waste prohibited by local regulations and / or they can reach RD in violation of treaties and agreements signed by many countries.

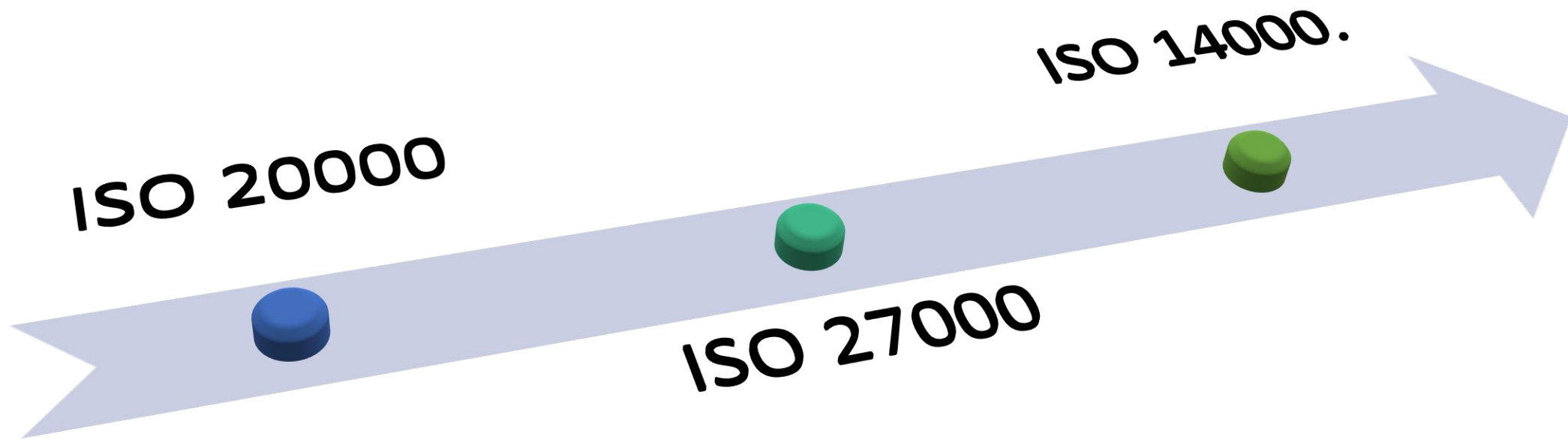
Ministry of Defence (Armed Forces)

- For security in the identification and detection of drugs, forgery, etc. identifications of explosives.

Attorney General of the Dominican Republic

- DGA can participate as experts of justice(In a science subject) only if is determined by a judge, this is only for special cases.

Certifications in process



Social Impact

The Laboratory is not a tool for determining the applicable tariff heading with accuracy.

It is a mechanism to improve our capability to provide high standards of protection for the public against potentially harmful goods.



Dirección General de Aduanas
Ministerio de Hacienda

Thank you so
much