

El futuro es de todos

Gobierno de Colombia

Pedro Pérez Vargas

Chairperson of the SIM Legal Metrology Working Group

Leader of the Legal Metrology Group of the Superintendence of Industry and Commerce in Colombia

## "Status of legal metrology" Colombia



## **01. FIRST STAGE**







The information collected from the metrological verifications was carried out on paper and was not digitalized.

The number of inspectors were not enough to perform verifications to all of Colombia.



#### **METROLOGICAL CONTROL**













MASS





FROZEN



UNIT



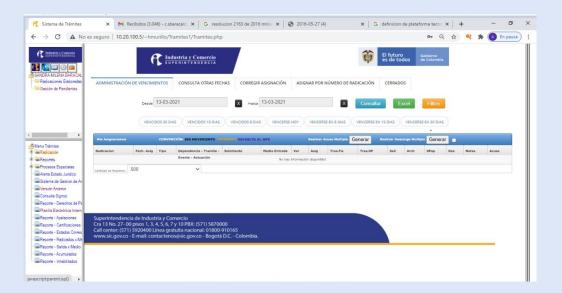
AGM (Actual Gross Mass): Masa bruta real

Imágenes de archivo SIC-ML

# 02. SECOND STAGE







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The Superintendency of Industry and Commerce must create a system of procedures that allows digitizing part of the information from the metrological verifications that were carried out.

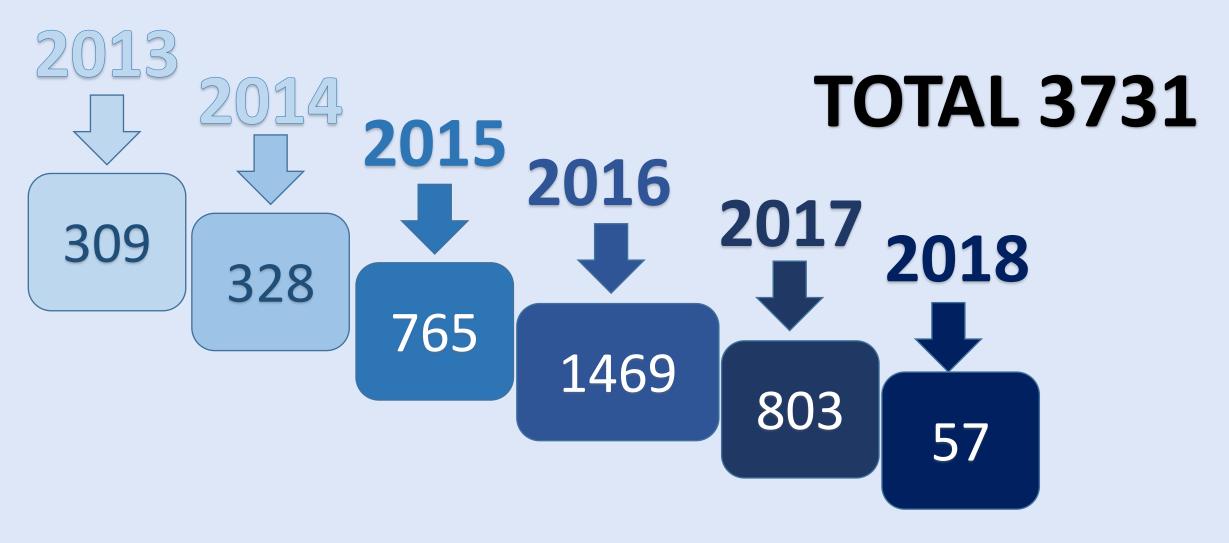
The number of inspectors was still insufficient to carry out verifications to all of Colombia.



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## NUMBER OF INSPETIONS 2013 - 2018





## ...THIS IS STILL NOT ENOUGH



#### **SUMMARY**

Calibration certificate was required periodically in accordance with what was established by the manufacturer. This is still the case for instruments that do not have metrological technical regulation.



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Any instrument could be traded on the market, regardless of its quality.



There was no computer tool that allowed the information collected in the metrological verifications to be stored.

# 03. THIRD STAGE

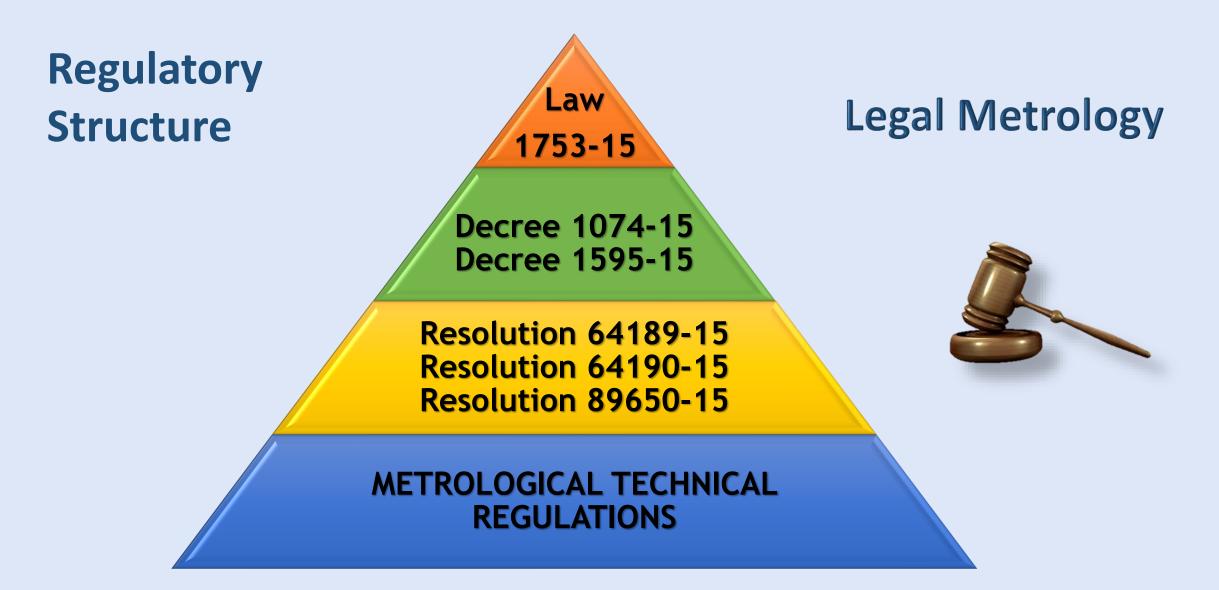




## **TECHNICAL REGULATION**











#### instruments



#### LAW 1753 of 2015 NATIONAL DEVELOPMENT PLAN- ARTICLE 16

Legal Metrology Information System (...). The Legal Metrology Information System (SIMEL) is created, administered by the Superintendency of Industry and Commerce, in which producers and importers, repairers and users or holders of measuring instruments subject to metrological control must be registered.

"(...) The Superintendency of Industry and Commerce will designate by administrative act the Authorized Metrological Verification Bodies (OAVM), the geographical areas in which they will act exclusively, the measurement instruments that they will verify. (...) "



#### **METROLOGICAL CONTROL AUTHORITIES**





Designated to carry out metrological checks



**MUNICIPAL MAYOR** 



AUTHORIZED METROLOGICAL VERIFICATION BODIES - OAVM



#### **AUTHORIZED METROLOGICAL VERIFICATION BODIES**







#### **RESOLUTION 64189 - 2015**

Eligibility requirements and obligations of the Authorized Metrological Verification Bodies

#### **RESOLUTION 64190 - 2015**

Regulates the metrological control of measuring instruments



#### **RESOLUTION 89650 - 2015**

Conformity assessment phase



#### **TECHNICAL REGULATION**





Resolución 64189-15 Resolución 64190-15 Resolución 89650-15

REGLAMENTOS TÉCNICOS METROLÓGICOS





NAWI

LIQUID FUEL DISPENSERS TAXIMETERS

EVIDENTIAL BREATH ANALYZERS



## **RESOLUTION 32209 OF 2020\***



RECOMENDATION OIML R 79: 2015 "Labeling requirements for prepackages"



### **OAVM AND LEGAL METROLOGY WORKING GROUP**







Fuente: Fotos Grupo de Trabajo de Inspección y Vigilancia de Metrología Legal





Created by the Superintendency of Industry and Commerce

#### Integrates all the information on legal metrology of the country

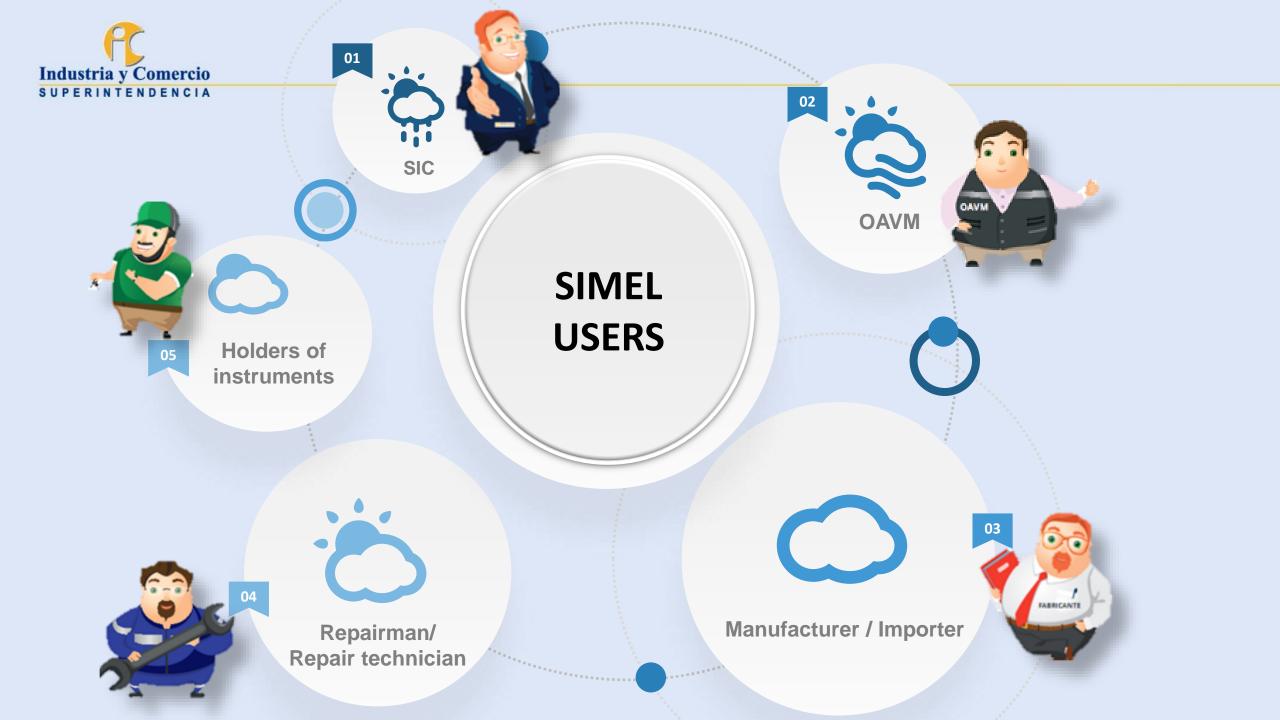
Actions of those involved in metrological control:

- Producers or importers
- Measuring instrument holders
- Repairmen
- OAVM and the administration as guarantor of security



## **OBJECTIVES**

- ✓ Ensure adequate metrological control in Colombia through the implementation of a computer tool administered by the SIC.
- ✓ Have reliable, timely and truthful information on the operations carried out by SIMEL users.





### **MEASURING INSTRUMENTS REGISTERED IN SIMEL**

CENSUS						
INSTRUMENT	QUANTITY					
NAWI	30.941					
Truck scales	241					
Fuil dispensers	12.855					
Grand Total	44.037					



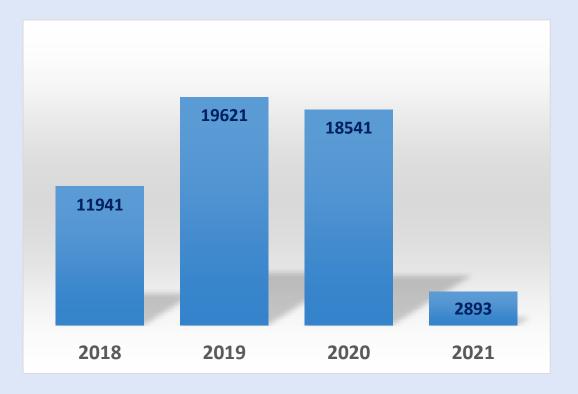




\* Information updated until february 2020



### **VERIFICATIONS REGISTERED IN SIMEL**



VERIFICATIONS 2018-2021 (FEBRUARY)						
TECHNICAL REGULATION	# VERIFICATION					
NAWI	28.216					
Truck Scales	764					
Fuel dispensers	24.016					
Grand Total	52.996					

\*Information updated until february 30, 2021



#### **CONCLUSIONS**

The measuring instruments are checked periodically and must conform to the maximum permissible errors.



The SIC has an accredited calibration laboratory for mass and volume magnitudes.

There is the Legal Metrology Information System –SIMEL. New instruments must demonstrate conformity according to the corresponding metrological technical regulation.

## 04. FOURTH STAGE





#### PREPACKAGED PRODUCT INFORMATION SYSTEM

A <u>unified information</u> system on prepackaged products, where each country can upload the information on the metrological control it has carried out.

Centralize the rapid exchange of information between the control authorities of the countries, providing <u>reliable, timely and truthful</u> information on the verifications realized on prepackaged products.



System that <u>allows data analysis</u> such as: products that are most verified, country with the highest number of non-compliances, products with noncompliances.

System that allows control authorities to organize <u>metrological verification</u> <u>operation and strategies</u>.



#### **NEW THECNICAL REGULATION**

**GAS METERS** 





#### WATER METERS







Imagen fuente: <u>https://www.cleanpng.com/png-the-book-thief-publishing-reading-bookselling-book-921074/</u>

Imagen fuente: <u>https://www.azosensors.com/article.aspx?ArticleID=250</u>

Imagen fuente: https://www.euramet.org/research-innovation/search-research-projects/details/project/metrology-for-real-world-domestic-water-metering

Imagen fuente: indiamart.com/proddetail/static-single-phase-two-wire-energy-meter-20377484397.html



## WHO IS THE NEXT?



