“Metrología para la Transformación Digital”

24 de MAYO 2023 | Bogotá D.C. COLOMBIA
Digital Transformation in Legal Metrology at Colombia: Current Situation and Future Challenges.

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

FIRST STAGE

SECOND STAGE

THIRD STAGE

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

Further, the number of inspectors were not enough to perform verifications to all of Colombia.

Faced with the measurement instruments that entered the country, any instrument could be traded in the market, regardless of its quality and a calibration certificate was required periodically in accordance with the provisions of the manufacturer.

The calibration of the measuring instruments was carried out by the INM.
CONCLUSIONS

1. The information from the metrological control verifications were not public.

2. The number of metrological verification records was uncertain, as there was no computer tool that would allow the information collected from them to be stored.

3. Approximately 13 people carried out the metrological checks throughout Colombia, therefore it was not possible to carry out checks on all measuring instruments and prepackaged products.
02. SECOND STAGE
The Superintendency of Industry and Commerce created a system of procedures that allowed digitizing part of the information from the metrological verifications that were carried out.

Enter the number
NUMBER OF INSPECTIONS 2013 - 2016

- 2013: 309
- 2014: 328
- 2015: 765
- 2016: 1469

TOTAL 2871
CONCLUSIONS

1. The information system is public and allows consumers to see, according to the filing number, the result of the verifications carried out.

2. The need to increase the coverage of metrological verifications and the control of new instruments throughout Colombia continues.

3. It is necessary to think about the creation of metrological technical regulations for measuring instruments and also establish requirements for producers, manufacturers, importers and owners of the same.

4. The need to increase the coverage of metrological verifications and the control of new instruments throughout Colombia continues.
03. THIRD STAGE
NEW APPROACH TO CONTROL METROLOGICAL

Regulatory Structure

Law 1753-15
Decree 1074-15
Decree 1595-15
Resolution 33882-21
Resolution 33883-21
Resolution 89650-15

METROLOGICAL TECHNICAL REGULATIONS

Legal Metrology
Designated to carry out metrological checks

MUNICIPAL MAYOR

AUTHORIZED METROLOGICAL VERIFICATION BODIES - OAVM
AUTHORIZED METROLOGICAL VERIFICATION BODIES

BÁSCULAS CAMIONERAS
Resoluciones 37514 y 59577 de 2016

BALANZAS Y SURTIDORES DE COMBUSTIBLE
Resoluciones 37514 y 44157 de 2016
SIC TECHNICAL REGULATION

NAWI

LIQUID FUEL DISPENSERS

TAXIMETERS

EVIDENTIAL BREATH ANALYZERS
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
# CENSUS

<table>
<thead>
<tr>
<th>INSTRUMENT</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>NAWI</td>
<td>35,652</td>
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<tr>
<td>Truckscale</td>
<td>301</td>
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<tr>
<td>Fuil dispensers</td>
<td>13,891</td>
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<td><strong>Total</strong></td>
<td><strong>49,844</strong></td>
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*Information updated until 03 May, 2023*
**VERIFICATIONS 2018-2023 (MAY)**

<table>
<thead>
<tr>
<th>INSTRUMENT</th>
<th># VERIFICATION</th>
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<tbody>
<tr>
<td>NAWI</td>
<td>53,494</td>
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<tr>
<td>Truck scale</td>
<td>1,416</td>
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<tr>
<td>Fuel dispensers</td>
<td>48,948</td>
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<td><strong>TOTAL</strong></td>
<td><strong>103,858</strong></td>
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*Information updated until 05 May, 2021*
### SIMEL INFORMATION

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<th>ITEMS</th>
<th>QUANTITY</th>
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<tr>
<td>Repairers</td>
<td>846</td>
</tr>
<tr>
<td>Repair Technicians</td>
<td>1,136</td>
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<tr>
<td>Repair loaded</td>
<td>46,324</td>
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*Information updated until 05 May, 2023*
CONCLUSIONS

The measuring instruments are periodically checked and must comply with the maximum permissible errors.

There is the Legal Metrology Information System –SIMEL, which allows obtaining documentation, statistical data and status of the measurement instruments.

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

New instruments must demonstrate conformity in accordance with the corresponding technical metrological regulations.
Status of legal metrology in the SIM Region

Introduction

A number of authors on metrology-related subjects cited in the Bibliography agree that legal metrology is important in many countries, that hepatitis is a major public health issue, and that the SIM is a valuable instrument for measuring

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04. QUARTER STAGE
A unified information 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 reliable, timely and truthful information on the verifications realized on prepackaged products.

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

System that allows control authorities to organize metrological verification operation and strategies.
NEW TECHNICAL REGULATION

GAS METERS

ENERGY METERS

WATER METERS
¡Thanks!