

# SIM

## Update to the RLMO Round Table

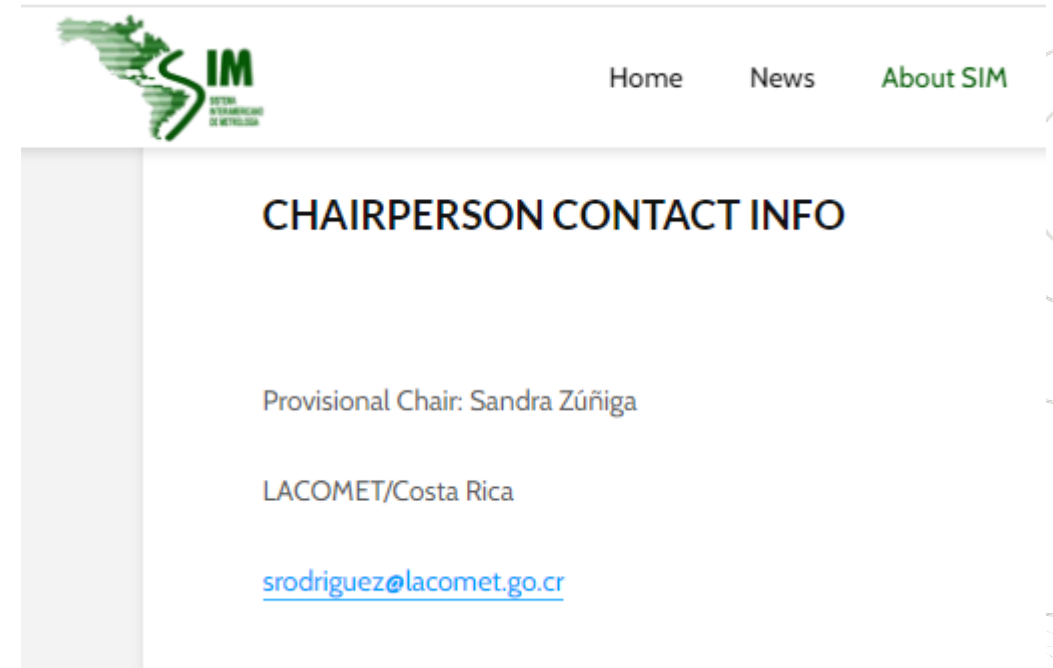
Sandra Rodríguez Zúñiga  
SIM – MWG 11 Legal Metrology  
SIM Legal Metrology Working Group  
Chair Leader of the Legal Metrology  
Department of the Costa Rican Metrology Laboratory

RLMO Interim Round Table Meeting- Sept 26, 2023



# Main update: Change in Chair

- Because the SIC status within SIM, according to SIM rules and Council decision, Pedro Perez cannot continue serving as the MWG11 Chair.
- MWG11 Chair responsibility

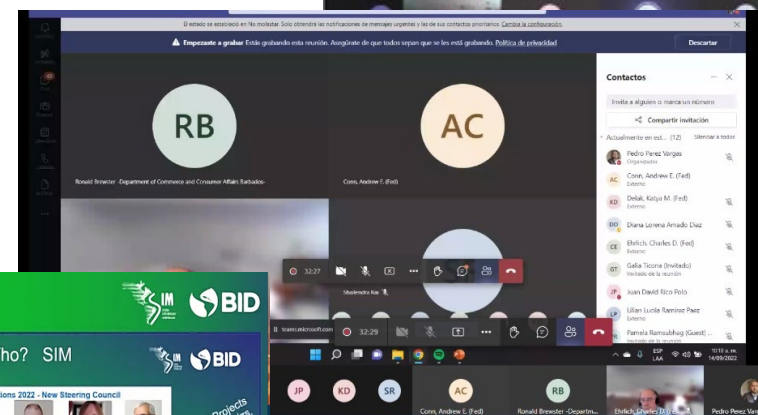
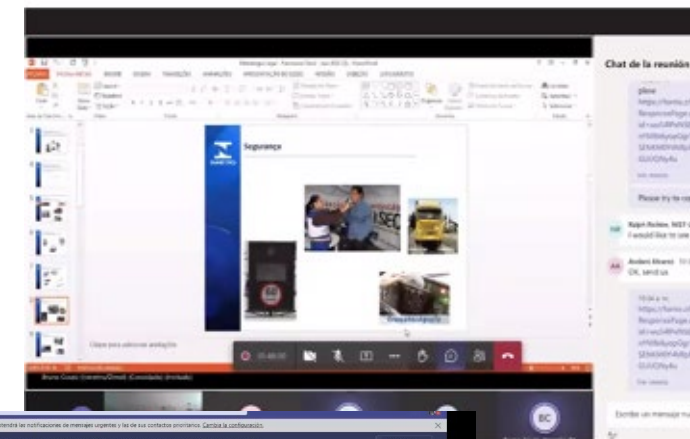


The screenshot shows the SIM website header with the logo and navigation links: Home, News, and About SIM. The main content area is titled "CHAIRPERSON CONTACT INFO" and lists the following information:

Provisional Chair: Sandra Zúñiga  
LACOMET/Costa Rica  
[srodriguez@lacommet.go.cr](mailto:srodriguez@lacommet.go.cr)

# Meetings

- March 14, 2023 SIM MWG 11
- SIM WEEK INM Colombia  
May, 23 -26 2023



- OIML D 31 General Requirements for measuring instruments controlled by software.
- Energy meters training -Brasil
- Fundamentals of Metrology. Bahamas, Belize, Costa Rica, Dominican Republic, Guyana, St. Vincent and the Grenadines, Panama, Paraguay, Trinidad and Tobago, and Uruguay. NIST

- Training in Korea for Legal Metrology Technicians
  - Legal Metrology System
  - Technical visits: manufacturers and in-field inspectors



- **TRIANGULAR COOPERATION JOINT WORKSHOP** Project for Strengthening Legal Metrology Capacity of the National Metrology Institute of Costa Rica



# Activities

Fuel dispensers

NAWI

regulation

Electric meters

- TC 6 / p 6 New publication: R87 prepackage template
  - Metrological control of prepackage products
- Publication in Bulletin

LEGAL METROLOGY INSPECTION AND SURVEILLANCE WORKING GROUP			
Industria y Comercio SUPERINTENDENCIA		6102	
METROLOGICAL CONTROL REPORT OF PREPACKAGED PRODUCT CONTENT - MASS			
<b>PRODUCT IDENTIFICATION</b>			
Name:	Jamón RICA CHEF	Presentation:	BOLSA
is the product ready to be sold?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Nominal Quantity:	1500 g
Lot number (sample):	L42266940004523979	Expiration date:	28-nov-21
Where verification is carried out:	1. PACKING POINT <input checked="" type="checkbox"/> 2. POINT OF SALE / DISTRIBUTION		
Were samples selected after the final packer checkpoint? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Did the samples pass all the metrological and quality controls established by the researcher? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>2. SAMPLE SIZE</b>			
N: LOT SIZE (according to information provided by the investigated, when the verification is carried out at the place of distribution and / or commercialization)			
N LOT SIZE ACCORDING TO ONE (1) HOUR OF PRODUCTION (in accordance with the information provided by the investigated, when the verification is carried out at the place of packing):			
964			
n: SAMPLE SIZE (According to ANNEX I. DETAILED SAMPLING PLANS. OIML R87):			
98			

6. CONCLUSIONS / RESULTS TECHNICAL REPORT			
a. In the sample there should not be a higher number of units with deficiency greater than the tolerable difference allowed (TT). It must be observed that: Number of non-conforming units ≤ Acceptance number for Error 1T (5)			
b. There should be no inappropriate prepackages in the sample that have a T2 error. It must be fulfilled that: Number of non-conforming units ≤ Number of acceptance for Error 2T (0)			
NOMINAL QUANTITY	NUMBER OF PRODUCTS OUT OF SPECIFICATION	PRE-PACKAGING ALLOWED WITH ERROR	CONCLUSION
1500 g	$O_{non-1T}$ 0	5	LOT ACCEPTED
	$O_{non-2T}$ 0	0	
a. The average real content must be equal to or greater than the nominal content, this is determined by evaluating the value of $e_{ave}$ like this: i) If the condition is met: $e_{ave} \geq 0$ the rule is fulfilled for the average. ii) If not, if the condition is met $e_{ave}/s + SCF < 0$ the inspection lot is rejected. iii) Otherwise the inspection lot is accepted.			
i) Value of $e_{ave} = 24.07$ Meets $e_{ave} \geq 0$ ? YES			CONCLUSION
			LOT ACCEPTED
ii) Value of $e_{ave}/s + SCF$ NOT apply Meets $e_{ave}/s + SCF < 0$ ? NO			(Not apply)

## RLMO FEATURE: SIM

Smart meters:  
The Brazilian point of view  
of legal metrology

JUAN CARLOS MATEUS SÁNCHEZ  
Technology Researcher,  
National Institute of Metrology, Quality and  
Technology – INMETRO, Brazil  
Direction of Legal Metrology / Sector of Electrical  
Quantities Measurements

## RLMO FEATURE: SIM

Status of legal metrology  
in the SIM Region

PEDRO PÉREZ<sup>1</sup>  
JUAN CAMILO DURÁN<sup>2</sup>  
LINA GARAVITO<sup>3</sup>

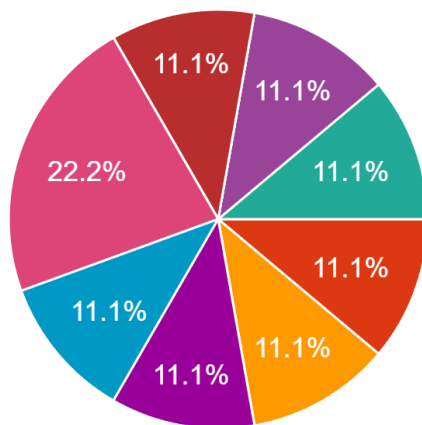




# MLWG 11 Information Update

What working group would you or a colleague like to be in?

9 respuestas



- NAWI
- Prepackaged
- Electricity meters
- Drinking water meters
- Fuel supplies
- Health: sphygmomanometer thermom...
- Digitization
- Smart meters
- Documents traduction
- Sound meters
- A mi me gustaria pertenecer principalmente al grupo de "Prepackaged", sin embargo, tambien me gustaria participar en los grupos de: NAWI, Electricity meters, Drinking wat...
- Prepackaged, Sound Meters, NAWI, Smart Meters, Electricity Meters

CENAME Guatemala

INACAL Perú

INEN Ecuador

INTI Argentina

LATU Uruguay

SLBS Saint Lucia

GNBS Guyana

# Metrology for Digital Transformation

THB (Temperature Humidity Bias)  
Evaluation System



- Capacity Building by Regional Exchange of Knowledge
- R&D Pilot Projects
  - DCC
  - Developing a low-cost THB with digital criteria
  - Advance on what “ Remote calibrations” can be
- Development of Integrated Platforms for Metrological Services
- Regional public Good Proposal for Handling and Evaluate PT and Regional KC supported on the cloud