

2017-09-12

# Market surveillance in the field of Legal Metrology – Joint Project

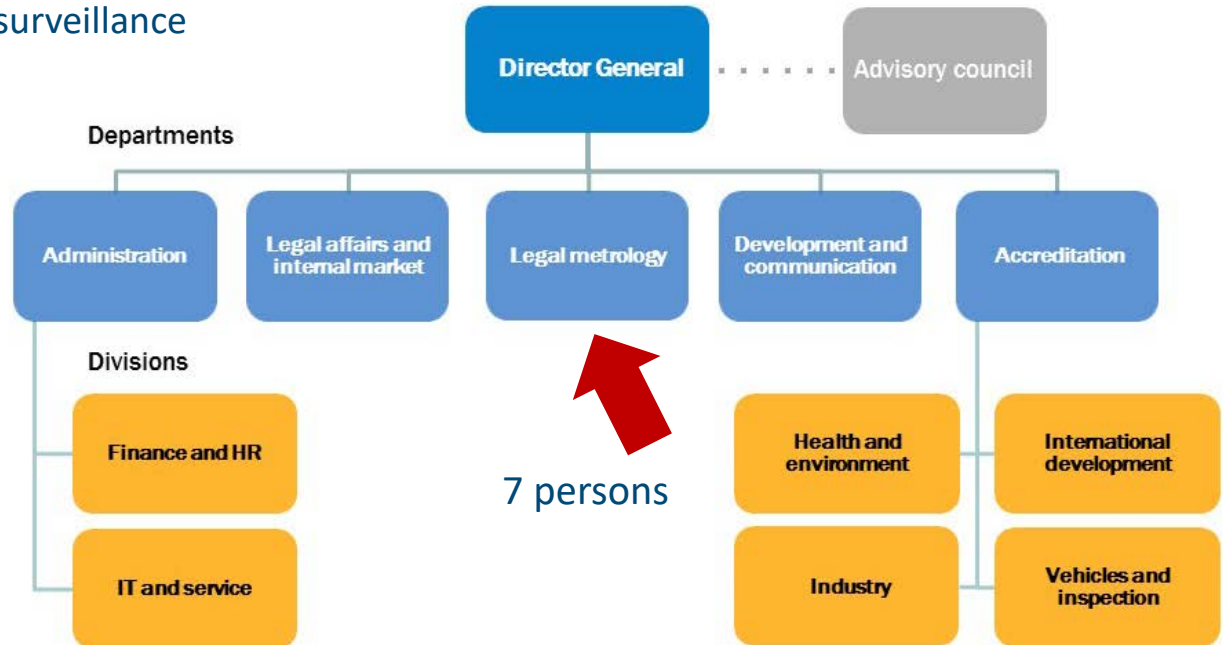
Olga Caratier

Analyst

Swedish Board for Accreditation and Conformity Assessment (Swedac)

# Swedac: public authority

- Accreditation
- Coordination of market surveillance
- Legal metrology



# Legal metrology



To assure correct measurements used for billing

**Swedish approach:**

- **consumer protection**
- fair competition
- fiscal purposes (taxation)

TRADE & TRUST

# Regulations on weights and measures

19 Sept. 1751.

Handels-Balken. Cap. 8. §. §. 1—4.

2. §.

Brukas någor i handel, upbörd eller utgift, falskt mått eller wigt; straffes som för tjufnad.

Förfälskar man något gods, gånge derom som om annan tjufnad. 1: 9. §. B. Om falskt mynt. 7: M. B. Lager någor swikeliga högre tull eller skatt ut, än bewiljadt är, stände dubbelt tjufrätt. 44: 1. f. B.

Den som begär stöld eller står tjufrätt, skall och stända uppenbar tyckoplikt, se 7 mom. i 43 punkten af K. Förkl. d. 23 Mars 1807, införd wid 1 Cap. 1 §. M. B.

Huru den straffas, som till mätning af färst till eller Gifkemahror brukar andre än fastskälde mätare-tunnot, wisa Författningarna under 1 §. af detta Cap.

3. §.

Fälskar then mått eller wigt, som är förordnad at them rättas och märkas; miste lifwet. Warder annar man tikwunnen at hafwa satt Kronens märke å mått eller wigt; miste åran, och böte hundra daler. Andrar någor frönt mått eller wigt, och thet således fälskar; warde öf årelöds, och böte femtijo daler.

Swedish act on trade 1751

2§

To use a false measure or weight in trade or tax collection is considered a theft.

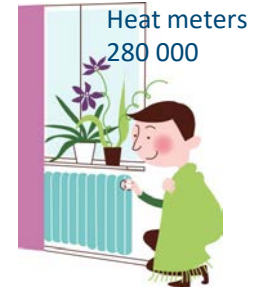
...

3§

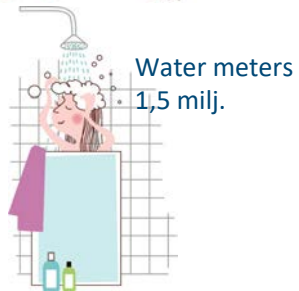
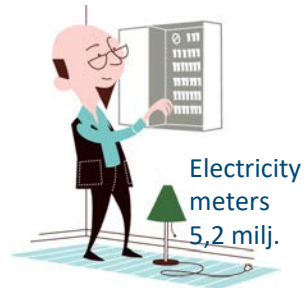
If a measure or a weight is falsified by someone who is appointed to adjust and mark them; he will loose his life.

To put the kings mark on weight or measure (without permission) have to pay a fine.

## Measurements in our daily life



Precious metals



## **European project in Market Surveillance of Measuring Instruments in 2014-2016 (MarketSurv MID) 101/G/ENT/IMA/13/11212**

- The project started by WELMEC WG5
- Proper risk assessment procedure was done by MSA in order to choose the instruments for the project
- Electrical energy meters and heat meters were selected
- Financial support from the European Commission

## Cost of the project

- **43 people from 12 different countries** have worked together in the joint project.
- **450.000 €- total cost**
- We have been awarded a grant from the **European Commission** of a maximum of a **70% of the eligible costs: 351.133,97 €**

## Participants in the joint project

<b>Participant name</b>	<b>Country</b>
Bundesamt für Eich- und Vermessungswesen	Austria
Consejería de Economía y Hacienda de la Comunidad de Madrid	Spain
Consumer Rights Protection Centre	Latvia
Czech Trade Inspection	Czech Republic
Danish Safety Technology Authority	Denmark
Federal Institute of Metrology	Switzerland
Finnish Safety and Chemicals Agency	Finland
Landesbetrieb Mess- und Eichwesen NRW	Germany
Metrology Institute of the Republic of Slovenia	Slovenia
National Measurement and Regulation Office	United Kingdom
Swedish Board for Accreditation and Conformity Assessment	Sweden
Verispect bv	Netherlands



## Description of the project

- For every selected type of meter, each MSA acquired three samples
- In order to design and implement the joint action the following regulations (MID, 765/2008) guidelines (WELMEC Guide 5.2 and 5.3, Blue Guide) and harmonized standards (EN50470:2006 och EN1434-4:2007) were used
- A common protocol was defined (general controls: formal checks/documentation/software and instrument-specific tests)
- All the instruments were tested and the test results were put together and discussed
- In case of non-conformities, the affected MSA handled the issue using its national legal procedures
- All the results were communicated through ICSMS
- Final report was presented and the workshop was held

## Results: active electricity meters

<b>Meters in the project</b>	<b>22</b>
<b>Non-compliant</b>	<b>9</b>
- Formal aspects	6
- Software aspects	6
- Sealing aspects	2

### Manufactures

- Landis & Gyr
- Itron
- Elster
- Eltako
- Iskraemeco
- Sagemcom
- ZIV
- Kaifa
- Aidon
- Echelon
- Kamstrup
- ADD Production
- B+G E-Tech

## Results: heat meters

<b>Meters in the project</b>	<b>18</b>
<b>Non-compliant</b>	<b>11</b>
- Formal aspects	8
- Software aspects	13
- Sealing aspects	1
- Other aspects	1
- Functional aspects	6

## Manufactures

- Landis & Gyr
- Itron
- Ista
- Kamstrup
- Sontex
- Apator Powogaz
- B-meters
- Danfoss
- Engelmann Sensor
- Hydrometer
- Maddalena
- Sensus
- Zenner

## Actions taken when a non-conformity was detected

Non-conformities electricity	Actions taken by MSA
<ul style="list-style-type: none"> <li>- Formal aspects</li> <li>- Software aspects</li> <li>- Sealing aspects</li> </ul>	<p>Manufacture was contacted for an explanation. Manufactures agreed to correct the non-conformities. No action was taken to modify, withdraw or recall instrument already on the market or in use.</p>
Non-conformities heat	Actions taken by MSA
<ul style="list-style-type: none"> <li>- Formal aspects</li> <li>- Software aspects</li> <li>- Functional aspects</li> </ul>	<ul style="list-style-type: none"> <li>- Manufacture was contacted to clarify detected non-conformity. Some non-conformities were corrected. In two cases the heat meters were recalled from the market. In another case the meters were prohibited from commercialization and withdrawn from the market.</li> </ul>

# ICSMS



European Commission

## ICSMS Private Area

[reporting an information Secur](#)  
[Term](#)  
[Privacy](#)

English (en) 
Inspector [2718]  ncaratol




1. GEN16022475609 / S / 2718 - Swedac


	<b>Product name (English)</b>	Active electrical energy meter
	<b>Date of Creation</b>	24/02/2016
	<b>Type / Model</b>	6531
	<b>Brand</b>	Aidon
<b>Product File Status</b>		Completed
<b>Product File Compliance Status</b>		No issues found
<b>Product File Risk Level</b>		Class 0 - no defects identified
<b>Product File Visibility</b>		EU/EFTA authorities

-  **Dashboard**
-  **Product/Case Info** 
-  **Baton Management**
-  **Search Authority**
-  **Info** 
-  **Evaluation**

# Lessons learned

- Coordination rules
- Instrument selection process
- Laboratory selection process

## New national market surveillance projects 2017: electricity meters, heat meters, weighting instruments

- To follow up Joint actions
- Budget 900 000 SEK
- All the test results will be available through ICSMS and [www.marknadskontroll.se](http://www.marknadskontroll.se)

Thank you for your attention!  
Any questions?