Verification System in Germany – market surveillance approach

Johann Fischer
Overview

A: The political and legal system in Germany

B: Organisation of the metrology and verification system in Germany

C: The Regional Verification Authority of Berlin/Brandenburg as an example

D: Market surveillance

E: Outlook
A: The political and legal situation in Germany

The Federal Republic of Germany is made up of 16 federal states.

The responsibilities of the Federal German Government and of the governments of the individual federal states are legally regulated.
A. The political and legal situation in Germany

The Measures and Verification Act was enacted by the Federal German Government.

The individual federal states are in charge of implementing this Act (unless other rules have been laid down in the Act, such as the responsibilities of PTB).

The Federal German Government lays down the tasks!

The individual federal states must provide materials and staff!
B: The organization of the metrology and verification system in Germany

Originally, each of the 16 federal states had a verification authority of its own.

After mergers, there are now only 13 authorities.
Centers of competence:

The LME is one of the three authorities in Germany with centers of competence for acoustics, dosimetry and mass.
Communication across federal state borders:

- Bund-Länder-Ausschuss (Committee of the Federal German Government and of the federal states/Chair: Ministry of oeconomic affairs)

- General assembly of PTB

- Rule Determination Committee

- Working Group „Metrology and verification“ (AGME) and its committees

- „Extranet“ of the verification authorities

- German Academy for Metrologie (DAM) (www.dam-germany.de)
C: The Regional Verification Authority of Berlin-Brandenburg as an example

The LME-BB was established in 2005

Two federal states – five locations
The Regional Verification Authority of Berlin/Brandenburg as an example

The LME-BB has 89 employees.

Revenue 2016: approx. 6.500.000 €
Expenses 2016: approx. 7.300.000 €

Ratio of cost coverage: 89 %

Approx. 48.000 verifications in 2016, including 2000 objections.
C: The Regional Verification Authority of Berlin-Brandenburg as an example

Gas pump testing trailer, old

Load vehicle, old

Gas pump testing trailer, new

Load vehicle, planned
### Examples of fees (based on actual expenses)

<table>
<thead>
<tr>
<th>Service</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taximeters (Verification)</td>
<td>77 €</td>
</tr>
<tr>
<td>Objection</td>
<td>57 €</td>
</tr>
<tr>
<td>Gas pumps (Verification)</td>
<td>121 €</td>
</tr>
<tr>
<td>Objection</td>
<td>90 €</td>
</tr>
<tr>
<td>Store scales up to 50 kg</td>
<td>66 €</td>
</tr>
<tr>
<td>Dosimeters (Verification)</td>
<td>146 € - 1.240 €</td>
</tr>
<tr>
<td>Acoustic equipment (Verification)</td>
<td>350 € - 1.200 €</td>
</tr>
<tr>
<td>Checking of prepackages:</td>
<td></td>
</tr>
<tr>
<td>125 batch sampling of the same nominal quantity</td>
<td>363 €</td>
</tr>
<tr>
<td>20 batch sample (destruction)</td>
<td>365 €</td>
</tr>
</tbody>
</table>
Fictitious fees for official verifications. These concern speedometers, red-light monitoring devices and Breath analyzers. 1,300 instruments were verified in 2016. Approx. 800 verifications were free of cost. Fees per instrument: 275 € - 496 €. That means, that 300,000 € in revenue could not be charged.

Developments since the year 2000:

Horizontal: year
Vertical: numbers of instruments
No initial verification anymore since 1. January 2015. Replaced with conformity assessment procedure.

**Consequence:**  The authority is no longer informed of new or renewed measuring instruments.

**Solution:**  The law now prescribes duty of notification for such instruments.

Whoever uses such instruments must notify these to the competent Authorities within 6 weeks after they have been put into use. 

The AGME executive office collects such notifications centrally.
Conformity assessments are the task of the private sector and are not incumbent on public authorities!

So far, only 3 private conformity assessment bodies

We are notified as a conformity assessment body and approved for 29 measuring instruments.

We assess instruments according to the modules F, F1 and (up to last year) A2 (capacity serving measures).

In 2016, approx. 2.300 assessments were performed.
C: The Regional Verification Authority of Berlin-Brandenburg as an example

State-approved test centers

In charge of verification of public utility meters for gas, water, heat and electricity.

The verification authorities are in charge of approving and monitoring these centers.
Quality management and proof of competence

- Each authority has a reliable quality management system
- At the core of that is the constant traceability of the test equipment to the national standards at PTB
- Standardized procedures
- Regular reviews by PTB
- Peer reviews

The German verification mark is accepted unconditionally in many countries, and even requested.
D: Market surveillance

Market surveillance for measuring instruments and prepackages

End-use control surveillance

- use of correct measurement values
- Determination with measuring instruments
- Duties of the instrument owner
- Conversion according to provisions

Metrological evaluation, monitoring of measuring instruments

Time period:
During the lifetime of measuring instruments when indicating measured values

Time period:
From placement on the market/putting into use

Initial verification replaced by EU procedure

Initial verification of measuring instruments
New in the Measures and Verification Act:

- Measuring instruments and prepackages are embraced in the term „product“, ensuring uniform implementation of the procedure.

- The use of measured values is legally covered and falls completely under surveillance.
EU regulations for surveillance (EC 765/2008)

- a market surveillance concept has to be submitted to the Commission at regular intervals and has to be continuously updated
- the AGME chair is the main contact person for market surveillance questions
- Electronic information exchange using ICSMS (internet-supported information and communication system for the pan-European market surveillance of technical products)
In Germany:

The federal states and the regional verification authorities are responsible for enforcement.

Agreements to act uniformly are reached in AGME.

A committee for metrological surveillance prepares special campaigns across federal states and also prepares the surveillance concept.
D: Market surveillance

<table>
<thead>
<tr>
<th>Active</th>
<th>Reactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled</td>
<td>Unscheduled</td>
</tr>
<tr>
<td>Own findings</td>
<td>Tips from third parties</td>
</tr>
</tbody>
</table>

Test

Evaluation of results

Notifications
- ICSMS
- RAPEX
- SAM

Measures
- Remedy
- Fines
- Informing the public
- Special conditions and bans
LME Berlin-Brandenburg 2016 - 17 special campaigns were conducted

Road tank vehicles

Checking of road tank vehicles with support of the police

24 measuring systems were checked

18 without objections

6 measuring systems with formal defects

Rate of objections:

25 %
LME Berlin-Brandenburg 2016 - 17 special campaigns were conducted

Taximeters

Checking of taximeters in collaboration with the customs authorities, the police and the municipal regulatory authorities

4 sites

223 individual checks

1 measuring instrument with metrological defects

Rate of objections:

0,45 %
LME Berlin-Brandenburg 2016 - 17 special campaigns were conducted

Prepackages

Checking of prepackages with different nominal quantities

851 batches were checked

260 objections

Rate of objections:

31 %
Processing of consumer complaints

40 tips

15 of these were confirmed to be violations

Rate of objections:

38 %
LME Berlin-Brandenburg 2016

Regulatory offences:

Cases filed: 394

Final notices: 199

Official contested: 15
Withdrawals: 4

Court cases: 10

Revenue: 57,000 €
E: Outlook:

- Rapid technological development
- Increasing digitalization
- Lack of qualified staff
Examples:

1. Taximeters for electric vehicles:

   No conformity assessment if the vehicle manufacturer does not supply information about the transmission of the signals.

   Steering political pressure in the right direction.
Examples:

2. Charging stations:

Setting up a network is an absolute priority

**BUT:** So far, no conformity-assessed measuring instruments.

Compromise: fixed fee
Examples:

3. „Smartmeter-Gateway“:

Active participation in the development of smartmeter gateways (taking into account the aspects of metrological and legal verification)

Quelle: Bundesamt für Sicherheit in der Informationstechnik – BSI, BSI-Bro15/332
Gracias por la atención