Joint Actions in Market Surveillance and Application of Risk Assessment Methods

MARS conference, Belgrade, 23 – 24 April 2014

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GIZ
Open Regional Fund for Foreign Trade Promotion
What would I like to talk about?

- GIZ and the Joint Market Surveillance Action
- Risk assessment methods
- Applying risk assessment in the Joint Market Surveillance Action
- Risk Assessment Template
Owned by the Federal Republic of Germany

A wide spectrum of specialist knowledge

A wealth of regional expertise

Extensive implementation experience

Operations in Germany and over 130 countries

Over 16,000 employees worldwide

Business volume of EUR 2.1 billion in 2012
Joint Market Surveillance Action in SEE

- Part of the GIZ regional market surveillance project
- Idea to share experience and jointly assess products
- Based on the EU – PROSAFE methodology
- Participants are authorities responsible for market surveillance: Albania, FYR Macedonia, Montenegro, Serbia, Kosovo* and Bosnia-Herzegovina.
- Joint actions period: November 2013 – May 2014

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Advisory Opinion on the Kosovo declaration of independence
Joint Market Surveillance Action in SEE

- **Hair dryers**
  (Low Voltage Directive)

- **Toy Telephone**
  (Toys Directive)

- **Children’s bicycles**
  (General Product Safety Directive)
Joint Market Surveillance Action in SEE

- Sample a product that may be non-compliant
  - Test it
  - **Compliance assessment**

- If it does not comply, find out how unsafe it is
  - **Risk assessment**

- If the risk is unacceptable, take action to remove the risk
  - **Risk management**
Risk assessment

- The idea behind a risk assessment is to find out **how risky a non-compliant product is to a consumer**. This is done by **analysing the hypothetical situation where a non-compliant product is put it in the hands of the consumer**.

- Risk assessment is the process whereby you determine how dangerous a product is to the user

\[
\text{Risk} = \text{Severity} \times \text{Probability}
\]

- The result is the risk level: **low, medium, high or serious**
Risk assessment

Source: EMARS book
Risk assessment

- Two tricky elements in the process:

1. The injury scenario:
   
   "A story of how the hazard injures the user"
   Agree on the "story"
   Agree on the steps in the scenario

2. The probabilities of the steps:

   Estimate probabilities
   Realistic estimates
Risk assessment

- **Example of scenario and probabilities:**

  1. The child detaches the beak.  
     - 100%
  2. The parents don't notice.  
     - 50%
  3. The child puts the beak in its mouth.  
     - 100%
  4. The small part goes into the child's airways and surgery is necessary to remove it.  
     - 0.1%

*Source: EMARS book*
Risk assessment

Commission's risk assessment tool
[europa.eu/sanco/rag]

➢ Available to everyone
➢ Several languages
➢ Intuitive
➢ Calculates the risk
➢ Ability to „save“, „send“, „print“ etc.
Risk assessment

Duck toy example scenario:

Step(s) to injury: Describe - 1 step per box

- The child detaches the beak
- The parents don't notice
- The child puts the beak in its mouth
- The beak gets in the child's airways

Probability of injury

<table>
<thead>
<tr>
<th>Step(s) to injury</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>The child detaches the beak</td>
<td>1</td>
</tr>
<tr>
<td>The parents don't notice</td>
<td>0.5</td>
</tr>
<tr>
<td>The child puts the beak in its mouth</td>
<td>1</td>
</tr>
<tr>
<td>The beak gets in the child's airways</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Calculate probability

<table>
<thead>
<tr>
<th>Severity of injury level</th>
<th>Calculated probability</th>
<th>Overall probability</th>
<th>Risk of this scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.000500000</td>
<td>&gt; 1/10,000</td>
<td>High risk</td>
</tr>
</tbody>
</table>

Create a scenario
Risk assessment

- Reality check

- Market surveillance authorities tend to be "worst case thinkers" and manufacturers tend to be optimistic

- In any case:
  - Authorities must take action against unsafe products
  - The reaction shall be **swift, proportionate** and **reflect the level of incompliance and the seriousness of the risk.**
Risk assessment – hair dryer

Product hazard
- Hazard group: Electrical energy
- Hazard: High/low voltage

Consumer type
- Other consumers
- Consumers other than vulnerable or very vulnerable consumers

How the hazard causes an injury to the consumer
- Typical injury scenario: Person can touch part of the product that is at high voltage; the person receives an electric shock and may be electrocuted.
- Your Injury scenario: Describe it: A user uses the hair dryer. The use uses hairpins to style the hair. A hairpin goes into the hair dryer. The person gets in touch with the hairpin. The person suffers an electric shock.

Severity of injury
- Typical injury: Electric shock
- Your injury: Electric shock

Select below a severity level (1 to 4):
1. (see also under burns as electric current can cause burns)
2. Local effects (temporary cramp or muscle paralysis)
3. Temporary disorientation
4. Electrocution

Probability of injury
- Step(s) to injury: 1 step per box
  - A user uses the hair dryer.
  - The use uses hairpins to style the hair.
  - A hairpin goes into the hair dryer.
  - The person gets in touch with the hairpin.
  - The person suffers an electric shock.
- Probability: Enter a value between 0.00000001 and 1.

Severity of injury level:
- 4: Electrocution
- Calculated probability: 0.000100000
- Overall probability: $\frac{1}{10,000}$
- Risk of this scenario: Serious risk

Torben Rahbek - www.torbenrahbek.dk
Risk assessment – hair dryer

- 2nd scenario
- For this product we developed 7 different scenarios
- Choose the one with the highest risk
**Risk assessment – example professional product**

<table>
<thead>
<tr>
<th>Consumer</th>
<th>Adult. Professional user.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td>Wall chaser with metallic connection from the rotating blade to the handle that the operator must press to activate the tool.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Steps</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The user is cutting a trench in an existing building with existing wiring (installation) concealed in painted walls.</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>The user does not switch off the AC mains because he needs power to run his tool</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>The user cuts across (and through) a live cable concealed in the wall.</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>The user is electrocuted because the live cable gets in contact with the cutter of the tool.</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk level</td>
<td>Serious risk</td>
</tr>
</tbody>
</table>

**Source:** rapex
Risk assessment - Measures

- No different in risk assessment
  - Could differ in actions and masseurs taken
- Consumer products
  - Public warning
  - Recall
  - Withdrawal
  - Stop sales
- Professional products
  - Modify product
  - Add warnings
  - Inform business/users directly

- The economic operator must be consulted
Risk assessment template and next steps

- A compilation of “standard scenarios” for common non-compliances of similar products without probabilities

- Next steps:
  - Final joint action in May, 2014
  - Closing conference
  - Use the risk assessment templates by inspectors in the future
  - Build on existing experiences
Thank you for your attention

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