Method for evaluation of compliance with Occupational health and safety legislation

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Abstract: Evaluation of compliance is one of the most important and efficient instrument in OHS responsibles activity at organization level. Together with risk assessment, it provides a complete workplace image from the point of view of health and safety. Indirectly, it provides a feedback about the quality of implemented OHS management system. The evaluation of compliance with legislation is a requirement of both Romanian OHS Law no.319/2006 and SR OHSAS 18001:2008. The paper presents a method for evaluation of compliance with legal requirements, complementary to audit methods focused on OHS management systems.

Key words: Occupational health safety, Evaluation, Legal compliance

1. Introduction
The evaluation of compliance process is similar with an audit process and is based on the same principles as auditing of quality and environment management systems. The recommendation of SR-EN ISO 19011:2003 standard [1] is fully applicable for an OHS audit, as well. However, OHS audit has some particularities due to involved audit criteria. In distinction from quality and environment audit, OHS audit should be treated in a differentiate ways, according to its two components:
- evaluation of compliance with OHS legislation (conformity audit), by which it determines the level of awareness and compliance with relevant regulations in organization or its structural subdivisions (sections, units, workplaces);
- audit of OHS management system, by which it determines if the implemented management system is efficient and corresponds to the requirements of referential.

Both of above mentioned components have as a general scope the identification of non-conformities with corresponding criteria and setting up the required corrective/preventive actions.

For a conformity audit, the criteria are represented by OHS Law no.319/2006 [2], Methodological Norms for Applying the OHS Law no.319/2006 (HG 1425/2006) [3], other relevant Govern Decision and organization's OHS proper instructions.

For an OHS management system audit, the criteria are represented mainly by the requirements of the standard SR OHSAS 18001:2008, transposing the British standard BS OHSAS 18001:2007.

2. DESCRIPTION OF AUDIT METHOD
The method is structured on three independent check-lists set (fig.1):
- check-lists on general risks;
- check-lists on specific risks;
- check-lists on OHS management in organization.

The general risks check-lists refer to the provisions of OHS Law no.319/2006, HG 1425/2006 and other Govern Decision transposing special EU directives regarding OHS. This set includes 17 check-lists, as follows:
I – Lighting;
II – Noise;
III – Vibration;
IV – Thermic ambiance;
V – Chemical agents;
VI – Carcinogens and mutagens agents;
VII – Biological agents;
VIII – Industrial ventilation;
IX – Technical equipments;
X – Workplace arrangement;
XI – Work space arrangement;
XII – Fire and explosions;
XIII – Electrical security;
XIV – Work duty;

Fig.1. The structure of conformity audit method

The checklists on specific risks should be completed
with provisions of organization's OHS instructions. The general and specific risks checklists are applied for workplace audit.

The checklists on OHS management in organization cover the following aspects, as in Fig 1: Fig. 1. Managerial development of OHS

- Employers participation (check-list A);
- OHS strategy, plans and procedures (check-list B);
- Employees consulting (check-list C);
- Risk identification, assessment and prevention (check-list D);
- OHS training (check-list E).

Each checklist includes a number of items referring to different aspects of analyzed risk and connected to norm articles

All checklists have the same structure and include the following information, as in Table 1,2.

Table 1. The check-lists structure

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>D/I/O</th>
<th>Score</th>
<th>Maximum</th>
<th>Granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.1</td>
<td>Were the lighting conditions analyzed at the section level?</td>
<td>D</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.2</td>
<td>Does the lighting level correspond to minimal values according with the type of activity?</td>
<td>D</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.3</td>
<td>Do employees complain of visual tiredness (stings, shedding tears)?</td>
<td>I</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.15</td>
<td>Was the level of lighting checked after modifications of lighting system?</td>
<td>D</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td></td>
<td></td>
<td>175</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Report of corrective/preventive actions

Organization:
Audited objective:
Date:

REPORT OF CORRECTIVE/PREVENTIVE ACTIONS

<table>
<thead>
<tr>
<th>Code</th>
<th>Non-conformity description</th>
<th>Corrective/preventive actions</th>
<th>Responsibilities</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

- 5 points for less important items (e.g. insignificant risks);
- 10 points for medium important items (e.g. risks with minor consequences);
- 15 points for important items (e.g. risks leading to reversible lost time injuries);
- 20 points for very important items (e.g. risks leading to irreversible injuries or death).

The maximum score is granted when all legal requirements referred by item are fulfilled. For partial conformity with these requirements, the score is reduced gradually until 0 points when the requirements are fully unsatisfied. When some items in a check-list is irrelevant, they will be quoted as "Inapplicable" and the total score of that check-list will be reduced with the maximum scores of the inapplicable items.

The identified non-conformities for each audited objective are registered in the Report of corrective/preventive actions, presented in fig.3.

The level of awareness and compliance with relevant regulations in organization or its structural subdivisions is expressed by "safety level", a conventional indicator showing the safety status of the work system.

For each used check-list it determine the maximum possible score and the granted score. These values are centralized in the table shown in Table 3.

Table 3. General safety level

<table>
<thead>
<tr>
<th>checklist code</th>
<th>Risk</th>
<th>Score</th>
<th>Maximum</th>
<th>Granted</th>
<th>Safety level</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL RISKS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I Lighting</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III Noise</td>
<td>295</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III Vibration</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XVII First aid</td>
<td>135</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>General safety level</td>
</tr>
</tbody>
</table>

The safety level for a risk (check-list) results as percentage between granted score and maximum possible score. The general safety level for audited objective results as percentage between totals of maximum possible scores and granted scores for relevant check-lists.

The third check-lists set provided by method is separately used to audit the OHS management at organization level. Items in these check-lists refer to
general responsibilities of employer according to provisions of OHS legislation. The structure of check-lists and the scoring of items are identical with general and specific risks check-lists, presented above.

The resulting values for maximum possible scores and granted scores are centralized in the table presented in Table 4.

Table 4. General conformity level

<table>
<thead>
<tr>
<th>Check-list code</th>
<th>Name</th>
<th>Score</th>
<th>Conformity level</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Employers participation</td>
<td>530</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>OHS strategy, plans and procedures</td>
<td>255</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Employees consulting</td>
<td>210</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Risk identification, assessment and prevention</td>
<td>285</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>OHS training</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td></td>
<td>1580</td>
<td></td>
</tr>
</tbody>
</table>

For each check-list in this set, it determines a "conformity level". The "general conformity level" results as percentage between totals of maximum possible scores and granted scores, and it shows how employer accomplishes the requirements of legislation regarding itself.

3. CONCLUSIONS

The method for evaluation of compliance with OHS legislation can be used to determine the levels of awareness and compliance with relevant regulations:

- at workplaces, with the general and specific risks check-lists;
- at organization level, with check-lists on OHS management

The evaluation of compliance with relevant legislation has a double importance being a requirement of both OHS Law no.319/2006 (art.13 lit.f) and SR OHSAS 18001:2008 (clause 4.5.2).

Together with risk assessment, it provides a complete workplace image from the point of view of health and safety. Indirectly, it provides a feedback about the quality of implemented OSH management system. According to Romanian legislation, OSH audit, as well as risk assessment at each workplace, is mandatory for all employers. Also, the conformity audit, as well as risk assessment, should be used in the initial analysis phase preceding the elaboration and implementation of OHS management system in order to picture the starting OHS image of organization.

This image will serve as reference point for further measurement of the management system performance, action required by the referential used for system implementation.

REFERENCES

[1]*** SR-EN ISO 19011:2003 Guidelines for auditing of quality and/or environment management systems