Contribution ID: **0** Type: **Oral**

Methodological Approach to Safety Analysis at CERN

Tuesday, 19 September 2017 14:00 (25 minutes)

The main aim of the workplace risk analysis is to establish a safer and healthier workplace by implementing identification of hazards, evaluation of risks where required and reduction of risk levels by adding preventive measures or controls, as necessary.

Unlike industrial workplaces, at CERN the research activity is constantly changing and it is common that personnel shifts from a duty to another of a quite different kind. Workers move through the site in the course of the accomplishment of their tasks and they may endangered by co-activities performed by other teams. This paper aims at addressing this special situation with an eye to the efficient implementation of safety management and proposing a proactive methodology for performing risk analysis.

The starting point of the method is the identification of the work perimeter by taking into consideration both the working activities and the working groups. Then, for each perimeter, a detailed description of all activities is carried out. The identification and the estimation of the severity of hazard is done. A full risk assessment is proposed in case the estimation of a hazard is not sufficient, due to the peculiar source of harm or to an insufficient knowledge of a linked installation. In order to facilitate the implementation of the proposed methodology, a set of tools, such as checklists, classification of hazards and templates, has been produced. The completed safety analysis for a perimeter and the resulting action list for the safety performance improvement is submitted to the supervisor in charge of the safety of the installations and the activities.

The implementation of the proposed safety analysis brings a twofold benefit: i) safer and more hygienic conditions and ii) availability of documentation for informing and training the workers on safety matters.

The methodology is validated on the field and a practical example of risk analysis carried out at CERN is described.

Email

francesca.viggiano@cern.ch

Primary author: Dr VIGGIANO, Francesca (CERN - European Organization for Nuclear Research)

Co-authors: Mrs LETANT-DELRIEUX, Delphine (CERN); Mr FORMENTI, Fabio (CERN); Dr OTTO, Thomas (CERN)

Presenter: Dr VIGGIANO, Francesca (CERN - European Organization for Nuclear Research)

Track Classification: Technical risks and Risk assessment