SAFETY ORGANISATION

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Abstract

The objective of this paper is to outline the new safety structure that has been put in place for CERN in general, and the LHC shut down in particular; its general organization, introduce the key players, provides an insight into the safety documentation that is available to help everyone, explains what is required to carry out any form of intervention in the underground areas and provides feedback on our strong and weak points.

RESPONSIBILITY

Safety responsibilities follow an executive line starting at the very top with the Director General, Department Leaders, Group and Section Leaders, down as far as each and every individual CERN staff member. The situation becomes much more complex when the work is organised in interdepartmental projects, subcontracted between groups, buildings shared between Departments and work creating high risk resulting form special hazards or coactivity or superimposition of work stations. For a complete in depth explanation regarding roles and responsibilities of all key players please refer to the CERN safety code A9 EDMS 337016.

In November 2006 the Director-General Mr. R. Aymar entrusted to the Safety Commission to carry out a full revision of SAPOCO 42 and issue a coherent set of safety rules. He further stated in a later publication in December 2007, which coincided with the up dated version of the new SAPOCO 42, that one of the important objectives of his mandate was to improve Safety at CERN. The most important change was that "ALL" executive 1 tasks aimed at ensuring the Safety of the personnel and the equipment shall be the sole responsibility of the Departments, who shall also be responsible for the effectiveness.

EVOLVING SAFETY CULTURE

Today there would seem to be a real policy in place that wants to create a real safety culture. This requires a complete change in attitude that becomes part of the individual's lifestyle and daily habits. Anyone can write a safety policy, but it takes real commitment on behalf of everyone in the Organisation to create and implement a complete safety culture. If we are to create a real safety culture at CERN, safety must come first and everyone involved should be taken into consideration, Safety Procedures must not simply be done to keep people happy with the hope of avoiding accidents. Safety should never be viewed as business risk or cost. If we can develop high standards in the work place a safety culture should be risk free and a profitable venture. By implementing and maintaining the safety culture from the conception stage of a project, and keeping it in place for the lifecycle of the project, the Organisation can not only reduce the number of accidents and incidents but also save valuable time and money. This is why safety must be built in from the conception stage of any new project. This is not systematically the case today at CERN, it must be said however that in nearly all new projects safety plays a vital role at CERN.

Further more we can no longer tolerate "special situations". All work, test and interventions must be planned, prepared, official authorisation given and the documentation relating to the operation concerned approved by all those concerned.

KEY PLAYERS

For the first shut down of the LHC 2008 and 2009 a new organisational structure has been put in place. It is imperative that everyone wishing to carry out any intervention in the LHC follows the new strategy. Once a work supervisor is aware that he needs to carry out an intervention he must first contact the planning Katy.Foraz@cern.ch who will give a window to carry out the work. Any person found working in the LHC without obtaining formal authorisation from the planning will be removed.

Planning is supported and assisted by the general coordination team headed by Serge.Grillot@cern.ch.The team is made up of the six LHC Site Managers whose new role is divided into three separate but equally important tasks. The first being assistant to the general coordination for his sector, the second as his title suggests, he manages the day to day running of his site and thirdly he has been appointed territorial safety officer for his sector.

These three roles combined give the Site Manager the unique opportunity to provide anyone working in his sector with valuable information concerning what is happening on daily basis, he should be the first person to call in case of a problem.

HEALTH AND SAFETY COORDINATION

There are currently three qualified Health and Safety Coordinators at CERN, each one employed by different departments: Emmanuel.Paulat@cern.ch BE, John.Etheridge@cern.ch EN and Michel.Arnaud@cern.ch PH. There will soon be a fourth safety coordinator, employed by GS. This will provide the Organisation with

a flexible pool of Health and Safety Coordinators with complementary skills to cover the machine shut downs and work requiring their expertise within the other departments.

What is their job? Their job is to prevent incidents and accidents, ensure that safety is integrated throughout all activities, evaluate the risks and including those resulting from co-activity and successive activities, ensure that the general principles of prevention are implemented and the rules and regulations are respected. To enable them to fulfil their role they need the help and cooperation of all those concerned.

STARTING WORK

Once official authorisation from the planning and general coordination has been obtained, the next step before the work on site can physically start is to take into account the information contained in the "Work and Safety Coordination Plan" https://edms.cern.ch/document/978710/2. This is a contractual document that must be issued as part of any call for tenders related to work to be performed in the LHC. The information contained within will enable to complete the Particular Health and Safety Plan (PPSPS). This document is to be completed by each contractor, subcontractor, collaborator, CERN group or staff member for the work they wish to carry out. The document must contain the habitual general information: names, addresses, qualifications, habilitation and formation of the staff who will be working on site. It is primordial that it contains a detailed description of the work to be carried out, what the risks are, not only for their staff but the risks they could export to others working in the area, what measures will be put in place to remove or reduce the risks and the equipment to be used to carry out the work.

PROFESSIONALS CHECK LIST

The work supervisor shall verify the safety documents are sent to all those concerned including the safety coordinator for approval. Once it has been approved by all concerned, the Joint Inspection (VIC) can be carried out. The work supervisor will contact the safety coordinator to arrange the date for the joint inspection approximately one week before the programmed start date. There are a certain number of key players that must be present at the joint inspection. They are the contractor, subcontractor, collaborator, CERN group or staff member, the supervisor him/herself and the TSO. During the visit the participates will see if there are last minute problems, see the actual site conditions, establish whether or not a cryogenic authorisation is required, or an electrical consignation for example, if this is the case Roger.Girardot@cern.ch TE/CRG shall be contacted. He will provide with the required documentation for the cryogenics and for all electrical consignation the contact point is Gerard.Pastor@cern.ch EN/MEF.

As the person in charge, the work supervisor will ensure that he has been given the means necessary to ensure that the written procedures can be put into operation on site. He will also ask himself the question whether or not he has been provided (or his work package contractors has provided the teams working on site) with everything needed to carry out the work safely. It is also the moment to ask any questions, if he is not sure or has doubts.

STRONG AND WEAK POINTS

The Organisation has shown over the years its redoubtable capability to get things done, to manage and control difficult situations, to meet deadlines and make the very most of the means made available to us. All of these things are very positive.

However there are a number of areas where we could make some improvements that would make everyone's life much easier. The creation of centralized data base for all safety documents, the creation of official cryogenics and pressure test documents, the simplification of the AOC to make it more user friendly. This would help improve our reactivity when producing safety documentation which at the moment is a little like the ***After Thought Syndrome.*** These actions in turn would enable CERN to implement a CERN wide safety culture with the same rules for everyone.

It is clear that without rigour and discipline, training, procedures and maintenance devastation can follow.

CONCLUSION

The new CERN safety culture is being to expand throughout ALL Departments, we must nurture it, help it gather momentum and grow, we must all work together for the same common goal, we must deal with the risk at source, we must plan preventive measures as part of our daily routine and we must adapt the working conditions to the workers.

It is essential that the necessary impetus comes from the very top management; they must lead by example and give the means to achieve our goals of obtaining a satisfactory safety situation for all and avoid accidents and professional illnesses.