



DG Employment.

Advisory Committee on Safety and Health at Work (ACSH), Standing Working Party (SWP) for the mines and other extractive industries, initiative on mobile machinery design.

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Framework Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work.



Basic principal

- **Assessing the safety and health risks which cannot be avoided, updating these assessments in the light of changing circumstances, and taking the appropriate preventive and protective measures**

Basic objective

- **“The underlying goal is to protect the health and safety of workers and ensure that at the end of his/her working day, the worker will return to his/her family in good health”.**



- Advisory Committee on Safety and Health. All Member States represented
- Tripartite membership, Government, Employers and Workers. (81 members)
- Established a Standing Working Party (SWP) for mines and extractive industries.
- Representatives from Germany, Poland, Slovak republic, Czech republic, United Kingdom, Ireland, Spain.



- SWP has agreed new mandate (Dec.2010) which includes:
- **Promoting the exchange of information** with the EU Member States on aspects **related to the health and safety of workers** in the mining and other extractive industries sectors, e.g. through the organisation of workshops or meetings with participation of experts from the individual Members States. **Specific areas of concern** include Methane Extraction, Nitrogen Oxides (NOX) and **Mobile Machinery Design**.



Sub task: Mobile machinery design.

- Information from employers that there are design issues causing accidents.
- SWP will evaluate concerns and report back to ACSH.
- Define other avenues for improvement

Ongoing actions.....



- Continue to collect data, project has now been adopted by European Aggregates Association (UEPG). Gives larger database of issues used to establish root cause of accidents. (Accident evaluations and statistics need to be performed in a common format with pre-defined criteria to ensure comparability)
- Promote transparency of issues to workers, employers, manufacturers and regulators.

The Machinery Directive 2006/42/EC



- Sets essential health and safety requirements (EHSRs) for the design and manufacture of safe equipment
- Application of the EHSRs must be:
 - based on a comprehensive risk assessment
 - reflect the state of the art

Some key EHSRs of the Machinery Directive for quarrying equipment



- Access 1.1.6, 1.6.2, 1.5.15, 3.4.5
- Lighting 1.1.4
- Visibility 3.2.1
- Ergonomics 1.1.6
- Driver's cab 1.1.7
- ROPS and FOPS 3.4.3, 3.4.4

Harmonised standards



- The EHSRs of the Machinery Directive are supported by European harmonised standards
- Application of harmonised standards confers a presumption of conformity with the EHSRs
- The standards for quarrying equipment are mainly developed by CEN TC 151

Improving harmonised standards



- Harmonised standards must be based on a consensus of all interested parties including users (employers, workers)
- Users can participate in standardisation at national and EU level
- Defective standards can be challenged by the Member States
(formal objection procedure)

Users should not have to retro-fit devices to make machinery safe



- Particular cases of non-compliant machinery should be reported to the national market surveillance authorities
- General problems relating to the application of the Machinery Directive can be submitted to the Machinery Working Group chaired by the Commission :
DG Enterprise and Industry



Way forward.

- Evaluate lessons to be learnt from extractive industries.
- Employers continue to collect and evaluate accident data if possible expand to include other regions (USA, South America, Africa, Australia, China etc etc).
- Workers report near misses or issues.



- Feedback results to ACSH, Standards bodies (e.g. CEN TC 151 and CEN SABOHS) and other interested groups.
- Member State market surveillance authorities may use information in evaluation of new products. (use of Article 10 and 11 of Machinery directive). Eliminate common problem areas.
- Feedback of machinery specific issues to Senior Labour Inspectors Committee (SLIC) Machex working group.



- Manufacturers use end-user (employer and worker) data to evaluate if issues can be eliminated or mitigated at design stage based on common customer feedback.
- Consider use of “end users risk assessment” of equipment during design to eliminate issues. (Manufacturers think like employer. Use hazard and operability studies (HAZOP)?
- Risk assessment is key component of certification procedure. (Annex VII of Machinery Directive) and consistent with Framework Directive.

Expansion into other industries...



- See if lessons can be applied to other industries using similar equipment e.g construction and agriculture.
- Apply improvement method to other problem areas.



Thank you for your attention