Market surveillance and work equipment standards: the role of the national authorities

Introduction

I see the TUTB's invitation to a French Ministry for Work representative to take part in this conference as being a significant move directly in line with more recent actions. Without delving back into the mists of time (I am thinking of the TUTB's first conference on the trade union role in standardization over 10 years ago, which the French Ministry for Work was also invited to attend), let me just mention:

- The French government's 1998 memorandum on the role of the public authorities in the standardization process
- The market surveillance conference held under the French Presidency in Paris in December 2000, where the TUTB representative stressed the importance of setting up a Community information system on the matter.
- The conference on safe products through market surveillance held in Berlin in October 2002, where the organizers (including the French Ministry for Work) stressed the importance of the debate with all interested parties, stating that: "In the interests of all market participants and groups with a stake in an effective market surveillance system, appropriate national and European forms of organization need to be created to allow long-term collaboration between the market surveillance authorities and market actors. For example, a Market Surveillance Forum, which would be convened on a regular basis, should be created (at the national and European level). The purpose of this Forum would be to bring together the different interests so that information could be exchanged and joint strategies developed" (Point 4 of the Conference Final Declaration).

It seems to me that this meeting shares that concern.

In line with that declaration, I should like to spell out how we see the feedback of market surveillance experiences taking place, illustrated by a few examples of market surveillance actions that impact standards development, and concluding with a look at how the future may play out.

Market surveillance, standardization, experience feedback

The first thing to say is that, by "standardization", I mean the process of framing harmonized standards in support of New Approach Directives (chiefly

machinery and personal protective equipment as far as my Ministry's work is concerned).

Market surveillance is an obligation which the Member States have under all the New Approach Directives. It aims to ensure that products meet the essential health and safety requirements that are given effect to an extent which needs to be precisely determined in the standards.

Market surveillance in France encompasses a feedback of experience from many sources based on an analysis of work-related injuries involving machinery, technical and ergonomic studies, checks at trade fairs and exhibitions, and a Ministry for Work database (known as "Madeira") set up for the systematic tracking of incidences of non-conformity found in workplaces.

The feedback of experience we have developed is a means of keeping under review the quality of work done by the "notified bodies", how well the Directive itself and its essential health and safety requirements are working, issues around equipment design by manufacturers, the recommendations to be followed by users, and the quality of standards. It is this latter point that I wish to expand on, although I also hope to show that action on technical standards and the other aspects of prevention activity are fairly seamless.

Our agenda for this activity is ergonomic work analysis, an approach which argues that the way in which machines are to be used differs according to the nature of their design, because the operator's use of them is constrained by time, social, economic and other factors. So the feedback of experience stems from a problem approach. This factor must be taken into account in data collection. This is one reason for the diversity of sources used in our market surveillance activity, and informs the issues that we look into.

In this connection, I should like to offer up a question for discussion: is the idea to develop the maximum possible "ergonomic design standards" or rather - as we believe - to work out technical standards that incorporate as far as possible ergonomic work analysis, which is a problem-oriented, bottom-up approach?

The Ministry's input to standards development also varies according to the scale of the hazard created by the machinery concerned. It may range from

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We use the information collected to:

- suggest improvements to standards in the works;
- inform debates set rolling by standards institutions, the Commission, or the Member States within the Machinery or Personal Protective Equipment Directive monitoring committees;
- lodge formal objections to what are patently deficient standards.

Selected examples of experience feedback

Action taken on a wide range of machinery and personal protective equipment could be cited to illustrate this, like portable tools, self-propelled trucks, refuse collection vehicles, mechanical presses, press brakes, woodworking machinery (moulding machines), gloves, protective masks, and so on.

I shall consider three: press brakes, fork-lift trucks, and refuse collection vehicles.

Press brakes and the framing of standard EN 12622

We did a qualitative analysis of all work injuries reported to us as involving press brakes, and visited trade fairs to get an idea of technological developments susceptible of being incorporated into Press Brakes Standard EN 12622.

As a result of our findings on the rate of work injuries involving these machines, we issued a national instruction to improve operator protection, particularly at the front faces of press brakes in service. The instruction covers various aspects relating to operator training and organizational measures, as well as proposals on protection devices, particularly for controls, to improve prevention of serious work injury risks.

Based on what we found at trade fairs, we went to the standardization groups in which our experts took part with proposals that safety devices like "multi-beam lasers" and "intrinsically safe programmable controllers" should be included (through an amendment to be published) in standard EN 12622 to improve the safety protection of press brake operators.

Self-propelled extendible reach trucks and standard EN 1459

We found that self-propelled variable reach trucks were becoming much more common on building and civil engineering sites due to their versatility. They are equally useful for handling and lifting nonsuspended and suspended loads alike in similar conditions to travelling articulated jib cranes.

Given the development of the field-installed base of these machines and this form of use, we also noted an upsurge in overloading and forward tip-over accidents with these fork-lift trucks which, although relatively new on the market, have no safety device to prevent the overturning moment being exceeded, even though required by the Machinery Directive in point 4.2.1.4. of Annex I, "Loading control".

But while standard EN 1459 of December 1999 - Safety of industrial trucks - self-propelled variable reach trucks - requires a safety device to warn operators nearing the overturning limit, it does not require a device to stop movement where that limit is exceeded.

It must be stressed that, while the standard was being framed, the French authorities and prevention bodies argued that self-propelled extendible reach trucks should be fitted with devices to prevent the overturning moment being exceeded on the grounds, among others, that this was already the practice among some manufacturers. But most of those involved in developing the standard were against fitting limiters, arguing that they could not address all overturning risks.

As a result of the German authorities' invoking of a safeguard clause against EN 1459 Safety of industrial trucks - self-propelled variable reach trucks, the European Commission mandated CEN to carry out a complete revision before 30 November 2001 of the standards concerned to accommodate the risks arising out of a foreseeable misuse of the trucks and truck roll-over/tip-over risks.

The French authorities discovered that CEN had not carried out its mandate by the deadline set, and again made representations to the European Commission to get the standard revision process going again.

■ Refuse collection vehicles and standard EN 1501-1

European harmonized standard EN 1501-1 adopted in 1998 set rules for the construction of refuse collection vehicles (RCVs). The standard prescribes two safety devices in particular: one preventing reversing, the other limiting the speed of RCVs to 30 kph with a person riding on one of the rear steps, to protect crew members working behind the RCV against the risks of ejection from the compaction mechanism while the vehicle is moving or the risks of being crushed against a stationary object by a manoeuvring RCV. But these safety devices were challenged, in particular after an incident which highlighted the risk created by unintended activation of the safety device. Amendments to the standard to address these issues were then proposed by the standards body.

The discussions on the changes to be made to the standard highlighted the problems with assessing the real impact of the standard's recommended safety devices on crew members' safety and working conditions.

The Ministry for Social Affairs, Work and Solidarity therefore saw a need to have a multidisciplinary study done by practitioners from different disciplines (ergonomist, occupational health doctor, engineer, sociologist) on the real-life work use of RCVs to pick out areas or progress and failings in the standard based on the problems actually met by operators (drivers, crew members, maintenance staff...) in their work and the preventive strategies they deploy, and to come up with recommendations for ways of improving the standard.

This study was commissioned from a consultant, and was based on identified accidents, observations of actual work situations (in four refuse collection firms) and interviews with a leading equipment manufacturer and an independent operator that manufactures its own RCVs. It found:

- That the safety devices prescribed by the standard interfere with the way in which crews manage and organize their pace of work, and do not always avoid potential risk situations when reversing.
- That safety system reliability had to be improved in light of users' practices and constraints.
- That the design of RCVs had to be revisited, with a bigger focus on the activity of crew members and the need for better crew member-driver communication. The study concluded that a real work station needed designing for crew members to prevent the aspects that made their jobs most strenuous: this would include the size and positioning of grab bars and rear steps, the location of the work station, and weather and noise protection, because some recent technical developments completely overlook this aspect.

Proposals will be made in the standardization groups, sponsored by the French authorities and prevention experts.

The future

Right from the start, we tried to enforce the Machinery and PPE Directives through a far-reaching system of controls based on information from the places in which work equipment is used. For equipment intended for use in firms, the Ministry for Work has set up a reporting system for non-compliant equipment, most of which are reported by labour inspectors.

From experience, we can pick out a number of issues that require further exploration:

■ The methods and procedures of data collection and

- analysis for a more detailed examination of what the non-conformities consist of, so as to come up with something of real relevance for users.
- The geographical scope of such a set-up, because the European picture is a mixed one: only a minority of Member States carry out checks. Maintaining purely national surveillance arrangements in what is already a single market is an open door to abuse.
- The long-term future of such a set-up in France and other Member States given the budgetary constraints and priorities set for the reform of the State.

The situation could be improved by a clearer definition at Community level of Member States' responsibilities, and developing cooperation between each Member State's market surveillance authorities and the European Commission, as well as initiatives to establish a European database of instances of nonconformity discovered by the public market surveillance authorities, expert bodies, representatives of users, etc. Proposals to this effect are coming out of the recent Commission Communication on the assessment of the New Approach Directives.

As to standardization, there still remains a long way to go because it is clear in our own case that our inspection staff have not yet developed the reflex of looking to see where standards are failing as part of their normal checks. But while standards have assimilated some of what experience can tell us, they can also fall short in real-life use. More field surveys by the labour inspectorate geared to feedback of experience with standardization through appropriate means - training, survey guidance, etc. - could help improve matters here.

But might it not also be possible at European level to carry out experimental analyses of accidents involving the use of a machine or type of machine to see how that can usefully inform standards development, and give collective thought to the most relevant methodology for data collection? Is this not something the European Agency for Safety and Health at Work could do? Our experience shows that accident analysis is a key way to improve both manufacturers' application of safety requirements and the quality of standards.

I hope these few proposals can help inform the debate and chart possible ways forward for a common discussion.