ETUI Seminar: Machinery safety in agriculture: better ergonomics for better working conditions

The Agricultural and Forestry Vehicles Regulation: The role and challenge for Market Surveillance Authorities

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Until January 1<sup>st</sup> 2016, tractors manufacturers must :

- 1. Ensure the conformity of the tractors to the directive 2003/37/EC
- 2. Ensure the conformity of the tractors to the EHSRs of Annex I of the directive 2006/42/EC for the risks not covered by directive 2003/37/EC
- Affix the CE-marking to the tractor and establish an EC Declaration of Conformity with these requirements. This EC Declaration of Conformity shall be included in documentation supplied by the manufacturer with the request for EC typeapproval according to Directive 2003/37/EC.





2016

January



The more important Delegated Acts for H&S is the first on functional safety and the second on construction safety\* These two Acts between them deal with both road circulation and health and safety requirements for the tractor, the attachments, and towed equipment.

Functional safety was introduced by EUP, defined as:

'the absence of unacceptable risk of physical injury or of damage to the health of persons or to property owing to hazards caused by mal-functional behaviour of mechanical hydraulic, pneumatic, electrical or electronic systems, components or separate technical units;

We need to ensure "*mal-function*" includes poor design e.g., by not following "safety integration" in which case the defective equipment could result in predictable human error leading to avoidable injury, illness or death

We should take the approach of "total quality management" and not "quality assurance"

\*others cover requirements for: environmental and propulsion performance; administration and on braking



17/1/2014

1/7/2014

Final Draft

Adoption by

COM

17/1/2014

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This EU Regulation and its delegated Acts have a wide scope and cover tractors, mounted equipment, towed trailers, and interchangeable equipment for on-road and also off-road (in use) risks. It is directly applicable legislation across the EU and gives free circulation of this equipment for road use. The situation for construction and industrial mobile plant is different as requirements for road use is not harmonised. This will continue to give an incentive to manufactures of certain types of multi-use vehicles with built in lifting and other equipment to designate them as "tractors".



The Regulation will modify, by Art 77, the "Machinery Directive" to exclude "tractors". However, mounted equipment, towed trailers and interchangeable equipment will remain in scope. This means both pieces of EU Legislation will continue to apply to such items.

It is critical that the requirements in the Delegated Acts mirror (i.e. are the same) as those in the Machinery Directive EHSRs when dealing with the same safety or health hazard. Careful scrutiny of the draft Acts and appropriate representation to the Commission will be needed to ensure there is no divergence in such requirements.

For this "Regulation" and its "Delegated Acts" we should particularly

concentrate on the "tractor and fitted equipment". This equipment can be extensive and if fitted by the tractor manufacturer it may not be considered "mounted equipment" and so be excluded from the "Machinery Directive". This means that only the requirements in this Regulation and Delegated



Acts will apply to some complex machinery (e.g. original telescopic lifting arm). We must ensure there is no "loop-hole" for reducing safety standards!

Member States should ensure, by interaction with the EU Commission, prior to 31/10/2013\* that the requirements of **safety integration** and other EHSR of the Machinery Directive are mirrored in the Delegated Acts. This is critical so pressure to improve poor agricultural standards is not undermined.

\* For the Construction Act you have until 6/11/2013 to respond, but as the requirements are mixed between the two Acts, working to the October date is more appropriate.



# **Ergonomics (Human Factors) is a key factor**

Ergonomics is relevant in many elements of both the Construction and Functional Delegated Acts. Good coordination is needed to ensure consistency and no gaps

It is not just causation of musculoskeletal problems, but "Human Factors" as a whole that is critical. Agricultural vehicle and attachments should, by their design, avoid predictable misuse and encourage safe and healthy use.

Systems region

In industry, accidents reduction has been split into three regions: **Physical** – guards, barriers, interlocks, etc. - needed **Systems** – systems of work and permits - needed **Cultural** – requires all staff to always spot risks and work safely

Cultural region

This view can result in thinking it's for the user to develop systems/cultural for safe use. However, the EU expect equipment to follow safety integration and to be designed to counter foreseeable misuse with user systems required where design can't reduce risk.

region

Safety integration

Accidents and i

health

In agriculture individuals work alone in SMEs and we know take risks, we cannot rely on safe systems of work, we need more emphasis on safety integration for its equipment design.

This legislation deals with "market surveillance" in parallel with Regulation 765/2008 in Art 5 & 7 with the needed powers/procedures in Arts 41 to 48, including Safeguard Action and Recall.

Together with the proposed new Regulation on Market Surveillance, Member States are expected to have:

- reactive and proactive risk based Market Surveillance programmes "on an adequate scale\*"
- these programmes to be reported to the Commission and other Member States.

In addition, EU Industry is pressing for better "policing" of the single market, saying "OK we comply with the various Directives, but we expect others (e.g. imports) to also comply and we need policing of the market/border or else EU Industry will unfairly suffer". Remember workers can suffer due to: injury; ill-health and losing their job!

\* Art 7 – it is not clear what "adequate" means. The view seems to be that current surveillance is often not seen as adequate!



### **Discussion point on market surveillance**

- Most MSA do not have the means to allocate more resources to market surveillance (unless a political decision to allocate more resources is made – this aspect is not consider in this presentation).
- To be more effective MSA need to work together. The ICSMS system, now owned by the EU Commission and being rolled out to all EU MSAs, can help coordinate resources, and prevent duplication of effort.
- The ICSMS database should also provide a basis of intelligence about defective industrial and agricultural equipment and the economic operators involved. This information can be used for better risk based targeting of the limited inspection resources in Member States and also for international proactive projects, for example those coordinated by the Machinery ADCO.
- In addition to information from ICSMS and other Commission systems, it is important to capture information from users of the relevant equipment and other bodies to aid targeting. This is especially important in the ergonomic area as ill-health tends not to lead to reactive intervention to the extent accidents can.

### **Discussion point on market surveillance cont'**

- The ICSMS-AISBL and a WG on Market Surveillance (MD ADCO) are proposing a horizontal WG to develop a risk based targeting techniques for industrial goods, where border control is often not easy. – Discussions with the EU Commission are taking place to arrange how this group can be set up and funded.
- MSAs involved in agricultural equipment are invited to express an interest in this work, and joining the WG when formed.
- The work by KAN and ETUI in connection with poor Standards give MSA a target both of machine type and the poorly addressed risks in the Standards. This should aid more efficient inspection and put pressure on manufactures to press for fully compliant Standards.
- To make the best impact and use resources efficiently, market surveillance project work coordinated in the relevant ADCO groups and supported by the Commission seems the most effective way forward.

