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International regulatory cooperation:

Sectoral projects

Report on the sectoral initiative on Earth-Moving Machinery*

Submitted by the Rapporteur

Summary

To protect workers from potential hazards, earth-moving machinery needs to be safe. In 2003, the Working Party set up a sectoral initiative on Earth-Moving Machinery to reduce technical barriers to trade in this sector but preserving the safety and reliability of equipment.

This document reports on progress in the work of the initiative.

Proposed decision:

The Working Party adopts the report on the sectoral initiative on Earth Moving Machinery. It requests the secretariat to continue to report on its development and implementation. It further requests the secretariat, depending upon availability of extrabudgetary resources, to assist in maintaining and developing contacts with Governments to promote the project.

I. Project objective and key deliverables

1. To protect workers from potential hazards, machinery such as excavators, wheel loaders and other earth-moving machinery (EMM) need to respect strict safety requirements.

* At its eighteenth session, the Working Party asked the secretariat to provide annual updates on the work of all the sectoral initiatives (ECE/TRADE/C/WP.6/2008/18, para. 63).

Both industry and governments have been developing and applying best practice and international standards, especially in the context of the Technical Committee 127 on “Earth-moving machinery” of the International Organization for Standardization (ISO/TC 127).

2. In all major markets, ISO standards have long been used as the basis for national standards. However, more and more countries are adding regulatory requirements, as well as requirements for repeated testing and lengthy conformity-assessment procedures, which inflate prices with no gain in safety and quality of the traded equipment.

3. In 2003, the Working Party set up a sectoral initiative to reduce technical barriers to trade in this sector while preserving safety and reliability of equipment traded internationally. In 2004, it approved the first version of the Common Regulatory Objectives (CROs) for the safety requirements of earth-moving machinery, and a revised version in 2009. In 2010, the project initiated a model certificate of conformity that, if broadly adopted, would make data exchange easier between the producers, machine users, third-party certifiers and the authorities of exporting and importing countries.

4. In 2011, “risk management” was recognized as an important consideration for EMM safety and was evaluated as addition to the EMM project. Market surveillance had not been previously considered in the project and risk management is a new area that is also important for EMM.

II. Main achievements of the Initiative until 2019

5. Since 2004, an international team has been promoting the general principles of the project in China, India, the Republic of Korea, the Russian Federation, South Africa and some countries of South America. It has been doing so both by promoting the adoption of the ISO/TC 127 standards as national standards and by recommending that countries use standards as the basis for technical regulations. Since most countries generally adopt the ISO/TC 127 standards as their national standards, the CROs were broadly considered as acceptable.

6. The compliance clause in the CROs (2004) allowed for conformity assessment only by using a supplier declaration of conformity. This, however, failed to meet the requirements of some of the developing countries, where the declaration is not considered a suitable tool for this sector.

7. The CROs were therefore revised and now allow for manufacturers to avail themselves of the services of external certifiers. This encourages the manufacturer and the third party to work within a stable framework; and testing that has already been done by the manufacturer can be used by the third party, within specific guidelines. The end goal of the process should be to build capacity at the manufacturer’s premises, so that ultimately the declaration becomes the alternative of choice.

8. A revised version of the CROs – approved by the Working Party at its annual session in 2009 (see ECE/TRADE/C/WP.6/2009/19, para. 36) – is available as an annex to ECE/TRADE/C/WP.6/2010/11.

9. In 2010, the EMM project initiated a model certificate of conformity to respond to requests that manufacturers receive for compliance and certification in many areas. A common certificate could benefit customers, government officials and manufacturers.

10. In 2015 the project encountered a new regulatory and certification challenge for replacement parts for EMM. Countries are requiring repeated testing and certification for replacement parts that have already been validated as a part of the machine development process. The EMM model regulation project has been expanded to address this challenge.

11. The main output of the EMM project in 2016 was contribution to the development of the ISO/TC 127 Technical Report (ISO TR 19948 Earth-moving machinery – Conformity assessment and certification process), which was published. The document presents best practices for standards, regulations, conformity assessment and certification of earth-moving machines. It can be used by countries who plan new standards, regulations, conformity assessment and certification processes for earth-moving machines. A global conformity assessment certificate is included in ISO TR 19948.

III. Activities in 2019 and deliverables for the annual session

12. The Earth-Moving Machinery Task Force exchanged information informally by e-mail and by discussions at standards meetings throughout 2019. The ECE Working Party 6 sectoral initiative on Earth-Moving Machinery was reviewed at the industry's global coordination meeting.

13. The next area of interest of standards and regulations for earth-moving machines is the Gulf Region. The team plans to continue to promote the adoption of the standards, regulations and conformity assessment processes developed in this project.

14. The international project team is continuing to monitor the need for standards and regulations and is prepared to provide training seminars to assist with the implementation of new standards and regulations.

15. The project team is supporting and promoting ISO standards for advanced automation, including: Autonomous Machine System Safety, Collision Warning and Avoidance Systems, Functional Safety of Controls, Computer Data Exchange.

IV. Responsibility for the continuation of the work

16. The Earth-Moving Machinery Project Task Force consists of the following persons:

- Dan Roley – Convener,
- Chuck Crowell (United States of America),
- Minpei Shoda (Japan),
- Stefan Nilsson (Sweden).

V. Role of the secretariat

17. The Task Force invites the Working Party to request the secretariat to keep the website updated and to assist the Convener in maintaining and developing contacts with Governments to promote the project, depending upon availability of resources.
