Progress report on the sectoral initiative on Earth-Moving Machinery (EMM) ¹

Submitted by the secretariat

Summary

To protect workers from potential hazards, earth-moving machinery needs to be safe. In 2003, the Working Party set up a Sectoral Initiative 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 and is submitted to the Working Party for discussion and adoption.

I. Project objective and key deliverables

1. To protect workers from potentially serious hazards, machinery such as excavators, wheel loaders and other earth-moving machinery (EMM) need to respect strict safety requirements. Both industry and Governments have been developing and applying best practice and international standards, especially in the context of the Technical Committee 127 of the International Organization for Standardization (ISO/TC 127).

¹ 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).
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 little 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” and “market surveillance” were recognized as important considerations for EMM safety and are being 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. Present status

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 through the use of a supplier declaration of conformity (SDoC). This, however, failed to meet the requirements of some of the developing countries, where SDoC 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 SDoC becomes the alternative of choice.


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.
III. Project meetings and conference calls held in 2015

10. The Earth-Moving Machinery Task Force exchanged information informally by e-mail throughout 2015. The UNECE WP 6 project was reviewed at the industry global coordination meetings in Tokyo in May 2015 and was discussed at the ISO/TC 127 meetings in February 2015 in Paris.

IV. Progress in 2015 and deliverables for the annual session

11. The international team is adding “Sustainability” as a consideration for the regulatory process. Sustainability includes people, environment and economics. The project to date has only considered safety or the “people side” of sustainability. Repeated conformity assessment testing and multiple certifications of earth-moving machines can significantly increase the cost of machines for customers. Earth-moving machines are low volume products with only a few machines per year sold into many countries for each model. Repeated testing and multiple certifications can impact sustainability for customers by unnecessarily increasing the cost of machines.


13. In 2015 the international team began to address the 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.

14. In 2015 the international team provided best practices training in Johannesburg South Africa for the SADC countries (16 southern Africa countries) and it is continuing to promote the project and to support new regulatory activity with seminars and participation in meetings in the following areas: China, India, Africa, Middle East, South America and the Gulf region.

V. Responsibility for the continuation of the work

15. The Earth-Moving Machinery Project Task Force consists of the following persons:
   • Dan Roley (United States of America) – Convener,
   • Yoshie Ideura (Japan),
   • Stefan Nilsson (Sweden).

VI. Role of the secretariat

16. The Task Force asks 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.