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Steering Committee on Trade Capacity and Standards

**Working Party on Regulatory Cooperation  
and Standardization Policies (WP.6)****Twenty-seventh session**

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Item 6 (b) of the provisional agenda

**Sectoral projects****Progress report on the sectoral initiative on Equipment for  
Explosive Environments<sup>1</sup>****Submitted by the Rapporteur***Summary*

Facilities such as mines, refineries, chemical plants and mills expose their workers and the surrounding environment to high risks. To minimize these risks and contain their potential consequences, all equipment used in these environments needs to be designed, installed, maintained and repaired in such a way as to avoid the risk of explosions. The goal of the Sectoral Initiative on Equipment for Explosive Environments (SIEEE) is to promote and increase safety, while at the same time eliminating barriers to the free trade and use of the equipment.

This document contains a status update on the Initiative.

*Proposed decision*

The Working Party adopts the report on the Sectoral initiative on Equipment for Explosive Environments. It mandates the Secretariat to continue to report on its development and implementation. It further requests the secretariat, resources permitting, to assist in maintaining and developing contacts with Governments to promote the project.

<sup>1</sup> 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).



## I. Project objective and key deliverables

1. Accidents and explosions in mines and offshore facilities result in loss of life, widespread environmental damage and economic losses throughout the world.
2. The aim of the Sectoral Initiative on Explosive Environments Equipment is to contribute to the safety of equipment used in these environments - to minimize the risk of explosions and contain their potential consequences for the workers and the surrounding areas - while at the same time eliminating barriers to the free trade and use of the equipment.
3. Specifically, the purpose of the Sectoral Initiative is to develop and promote a common regulatory framework (CROs) for the “Equipment for Explosive Environments” sector. The framework includes not only common regulations, but also common and agreed conformity-assessment practices and market-surveillance procedures
4. Equipment used in high-risk facilities is highly sophisticated. Checking that it conforms to international best practice and current regulations is a complex task, even for those regulatory authorities who have substantial resources and modern equipment at their disposal. The initiative works in close cooperation with the industry and with independent third-party conformity-assessment bodies, since it is in these two communities that expertise is kept up to date with technological progress.

## II. Main achievements of the Initiative until 2017

5. At its twentieth session, in 2010, the Working Party revised the CROs that it had approved a year previous. The 2010 version was published in a bound brochure thanks to support in kind from the International Electrotechnical Commission. The brochure—which can be downloaded from the UNECE and on the IEC websites – was launched by the two organizations in April 2011 (see press release: [http://live.unece.org/press/pr2009/09trade\\_p11e.html](http://live.unece.org/press/pr2009/09trade_p11e.html)).
6. Translations of the CROs into Arabic, Chinese, French Portuguese, Russian and Spanish were made available by the International Electrotechnical Commission in 2013 and are available on the WP. 6 website: [http://www.unece.org/fileadmin/DAM/trade/wp6/SectoralInitiatives/EquipmentForExplosiveEnvironment/SIEEE\\_CRO\\_ENG.pdf](http://www.unece.org/fileadmin/DAM/trade/wp6/SectoralInitiatives/EquipmentForExplosiveEnvironment/SIEEE_CRO_ENG.pdf)
7. Additionally, in 2011, the Sectoral Initiative prepared guidelines for market surveillance authorities responsible for equipment used in Explosive Environments (Hazardous Locations). The guidelines are also available on the WP. 6 website [http://www.unece.org/fileadmin/DAM/trade/wp6/SectoralInitiatives/EquipmentForExplosiveEnvironment/SIEEE\\_Guidelines\\_ENG.pdf](http://www.unece.org/fileadmin/DAM/trade/wp6/SectoralInitiatives/EquipmentForExplosiveEnvironment/SIEEE_Guidelines_ENG.pdf)). They will be further discussed and approved to form part of a revised version of the CROs.
8. Reference materials prepared previously by the Sectoral Initiative are:
  - (a) a compilation of the legal framework in force in this sector on the world main markets in the sector Explosive Environments, available as an annex to document ECE/TRADE/C/WP.6/2009/6, and posted on the website: [http://www.unece.org/fileadmin/DAM/trade/wp6/documents/2009/wp6\\_09\\_006E.pdf](http://www.unece.org/fileadmin/DAM/trade/wp6/documents/2009/wp6_09_006E.pdf)
  - (b) a project proposal for organizing capacity-building events worldwide to raise awareness by regulators of the high risks and challenges that are inherent to the sector, and highlighting best practice in industry, standardization and certification bodies. The project

proposal is available as an annex to ECE/TRADE/C/WP.6/2010/12, available at [http://www.unece.org/fileadmin/DAM/trade/wp6/documents/2010/wp6\\_10\\_012e.pdf](http://www.unece.org/fileadmin/DAM/trade/wp6/documents/2010/wp6_10_012e.pdf)

(c) an update of the Questionnaire, about the regulations and procedures about the equipment in explosive environments of various countries undertaken by the project team in 2013 and also available at <http://www.unece.org/trade/wp6/sectoralinitiatives/equipmentforexplosiveenvironment/sieeee.html>.

9. IECEX and UNECE co-organized 4 International Conference/Workshop in Dubai (United Arab Emirates), Kuala Lumpur (Malaysia), Fortaleza (Brazil) and Gdansk (Poland) aimed at promoting the UNECE regulatory framework to regulators from the region. At the Workshops the Coordinator of the Sectoral Initiative presented the Common Regulatory Framework for the Ex Equipment industry. The comprehensive approach of UNECE Model L Regulation was discussed as the basis for global rules for this sector.

### **III. Meetings and awareness-raising activities in 2017**

10. The Sectoral Initiative continued activities to promote the CROs to regulatory authorities internationally. An UNECE-IECEX Workshop took place from April 21 to 22 in Shanghai, China. About 400 participants were informed about the ongoing initiatives. The participants welcomed the approach and agreed to support it.

11. Market surveillance plays an important role for increased safety in this sector, and the sectoral initiative has continued to work in cooperation with market surveillance authorities. In particular, a meeting between SIEEE and representatives of IECEX took place in May 2017. It was agreed that requirements are necessary to implement operational procedures with respect to Market surveillance activities.

12. A discussion with the EU-Commission about further activities shows the interest of the EU-Commission to take into account the “life cycle approach” of the Common Regulatory objectives”. The EU-Commission will start a market study about the ATEX-Directive the next year. An input of SIEEE would be appreciated.

13. The Coordinator of the Sectoral Initiative and the Russian delegation met in September 2017 in Washington and continued the work to update the CROs. The meeting concluded that there is a need to update the UNECE CROs and to develop detailed procedures for their practical application so that regulators can more readily understand and implement them. A recommendation for the qualification of testing laboratories and the procedure for certification schemes with respect to non-conforming products will be developed. The principle structure of the CRO will be retained to minimize disruption for countries already using this approach within their regulatory systems.

### **V. Responsibility for the continuation of the work**

14. The current Coordinator of the Sectoral Initiative is Mr. Frank Lienesch.

### **VI. Role of the secretariat**

15. The Initiative invites the Working Party to instruct the secretariat to continue supporting the work of the Initiative by servicing its meetings and keeping the website up to date. Resources permitting the secretariat could assist the Convener in maintaining and developing contacts with the counterparts of the Initiative in national Governments and regional groups.