Status Report:
1. Kick off meeting 2007 in Geneva
   Presentations of the various systems, Questionnaire
2. 2008 in Paris
   Discussions of the answers of the Questionnaire
3. 2008 in Geneva
   Preparation of the Terms of Reference
4. 2009 in Stockholm
   Discussions about the approach of the CRO
5. 2009 in Melbourne
   Preparation of the CRO (proposal)
ECONOMIC COMMISSION FOR EUROPE

COMMITTEE ON TRADE

Working Party on Regulatory cooperation and Standardization Policies

Nineteenth session
Geneva, 24-26 November 2009
Item 6 (b) of the provisional agenda

REGULATORY COOPERATION

SECTORAL PROJECTS

Progress report on the Sectoral Initiative on Explosive Environments Equipment
General Approach of the CRO

- Placing on the market
- Equipment
- Installation
- Inspection and Maintenance
- Repair

Life cycle approach
Scope Statement of the CRO

- Recommendation L (ECE/TRADE/378 – UNECE Recommendation on Standardization Policies)

- Reference to international standards and conformity assessment procedures developed by IEC and ISO

- Electrical and mechanical equipment requirements for being placed on the market, for the safe installation and use in the workplace

- Zone-Concept: Hazardous location with high, middle and low risk

- Life-cycle approach: inspection, maintenance and repair

- International recognized certification scheme, like IECEx

- Market surveillance activities as an essential element
» Elimination of possible ignition sources in accordance to intended use of the equipment, typical ignition sources are:
  » Hot surfaces
  » Electrical sparks
  » Mechanical sparks
  » Electrostatic

» Validated protection concepts ("Types of Protection") have to be applied

» Instructions (manual) about the intended use, installation and repair

» Conformity assessment procedure in accordance to an international certification scheme such as IECEx (IECEx procedure can be seen as a reference)
CRO Part 2: Safe use of the equipment

» Classification of the substances in accordance to:
  » Ignition Temperature
  » Explosions Groups (Ignition Energy)

» IEC-Zone Classification Concept (Zones for Gas and Dust) with the applicable Equipment Protection Levels

» The equipment and its installation need to be inspected and maintained

» Requirements for the competency of personnel (selection, installation, use of the equipment)

» Requirements for service facilities (e.g. repair workshops)

» The Explosion risk assessment of an individual plant needs to be documented in the “Explosion Protection Document”
» Accepted Standards (ISO/IEC) are listed in an annex to the regulation

» The standards has to be accepted by a Standard Acceptance Group

» After the acceptance the Standards can be applied by manufacturers and end users to show compliance with the regulation

» All countries which have implemented the Regulation enjoy the advantages like barrier free trade of explosion protected equipment and equal conditions for operating a plant bearing explosion risks
» The accreditation body has to be a member of ILAC/IAF

» The accreditation of
  » Conformity Assessment Bodies
  » Test Laboratories
  has to follow the applicable ISO/IEC-Standards

» Certificates have to be in line with ISO Type 5 requirements

» Procedures and Rules of the IEC Conformity Assessment System IECEx is to take as a reference for conformity assessment
An Explosion Protection Steering Committee is to formed and operated under the umbrella of UNECE WP.6 (ExSC) to monitor the application experiences.

All member having implemented the regulations can participate in the Explosion Steering Committee (ExSC).

ExSC notifies the members of the Standard Acceptance Group.

Observers like
- Standardization Organization (IEC/ISO)
- Market Surveillance
- IECEx

are also invited to attend the meetings.
» A Market Surveillance network specialized in Ex-Equipment is to be formed and operated (UNECE-ExMars)

» For critical non-conformance of Ex-Equipment an Alert-System is necessary
IEC/ISO

Placing on the market

IEC 60079-0
ISO/IEC 80079-0

IEC 60079-10
IEC 60079-14

IEC 60079-19

Repair

IEC 60079-17

Inspection and Maintenance

IEC 60079-14

Installation
Principal Approach of the CRO Reference to Standards

- **Testing**
  - ISO/IEC 17025
  - IECEx 02

- **Production**
  - ISO/IEC 17021

- **Certification**
  - ISO Guide 65
  - [ISO/IEC 17065]
  - IECEx 02

- **IEC**
  - ISO
  - IECEx

- **Personnel Competency**
  - ISO/IEC 17024
  - IECEx 05

- **Service**
  - IECEx 03
Next steps

» Call for comments in accordance to the proposal of the Common Regulatory Objectives (CRO)

» in doing this members should involve national groups of stakeholders (especially in industry) properly

» if there is a need to get deeper information (e.g. by a workshop) on national level SIEEE officers are happy to give assistance (training courses for regulators)

» next Sector Project Meeting August 2010 in Berlin parallel to the IECEx-meeting