The ATEX Directive 94/9/EC
operation and perspectives in Europe and the World
The ATEX sector in the European Union

- From the “Market description, competitiveness analysis in the field of products and protective systems intended for use in potentially explosive atmospheres” (1999) …

- … to the “Impact assessment accompanying the proposal to align 10 product harmonisation directives to the New Legislative Framework” (2011)
The ATEX sector in the European Union

- **Key data:**

<table>
<thead>
<tr>
<th>ATEX products</th>
<th>Size of the industry (market output)</th>
<th>Trade balance (share of imports)</th>
<th>Industry structure, SME presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical, electrical and telecommunication equipment, protective systems and devices, to be used in potentially explosive atmospheres (in underground mines, petrochemical plants, oil refineries, filling stations and other places where flammable gases may be present, and also premises like flour mills and agricultural warehouses where airborne dust can present an hazard): mechanical gears, brakes and seals, gas and steam turbines, electrical motors, pumps, fans, electrical tools and instrumentation; fork lift trucks; filter units and vented silo bins; switches, control and detection systems and components, torches, plugs and sockets outlets; heating cables; computers, phones and other similar equipment; vent panels, enclosures, sparks arrestors, temperature protective devices; etc.</td>
<td>€2.2 billion</td>
<td>Positive trade balance: Imports amount to €400 million. Internal consumption estimated at €1.9 billion, 86% of internal production</td>
<td>The ATEX sector is characterised by a large number of SMEs and micro enterprises, around 90%, mainly based in France, Germany, Italy and the United Kingdom, but also with significant presences and market shares in Denmark, the Netherlands, Poland, Spain and Sweden, as well as in Norway and Switzerland.</td>
</tr>
</tbody>
</table>
The ATEX sector in the European Union

• Facts and figures: structure

- ATEX sector is a very specific market, primarily with products for oil, gas and petro-chemical plants. The scope of products can not be considered as an economic sector in the full sense of the term, as it includes mechanical, electrical equipment and even telecom equipment, non-consumer goods with specific industrial products in a relatively restricted sector.

- There are more than 750 companies producing ATEX products in the EU, employing around 15 600 people.

- Among the enterprises specialised in ATEX equipment of different kinds and categories, in many cases it is a specific part/work line of wider production processes, as “ATEX-adaptation” of basic equipment. In this sense, it is quite difficult to evaluate the real turnover and market share of ATEX equipment for these enterprises. There is a relatively small number of “real ATEX” manufacturers, operating in niche markets with few competitors.
The ATEX sector in the European Union

• Facts and figures: internal and external trade

  ▪ ATEX equipment manufactured in the EU is mainly addressed to the internal market, but it is also exported to other European countries outside the EEA as well as to USA and Asian countries.

  ▪ The most important countries of origin of imports are USA, China, Japan, South Korea and Canada. There are around 100 importers, mainly international/multinational companies.

  ▪ On the EU market there is also a significant presence and market share of ATEX equipment produced by companies with factories, production and/or distribution centres in the EU but owned by non-European groups, or directly imported from non-European countries.
The ATEX sector in the European Union

• Facts and figures: impact of legislation on the market

  ▪ Legislation on hazardous areas contributed to a significant market growth.

  ▪ During the first period of the implementation of the ATEX Directive (from publication to entering into force on 1st July 2003), the existing market did not record relevant changes, given that a large number of products already fall under the “Old Approach” legislation.

  ▪ During the second period (from entering into force on 1st July 2003 onwards), taking into consideration also the general growth of production in the oil, gas, chemical and pharmaceutical sectors, the market evolved towards a re-organisation and increasing effectiveness: the number of producers continues to decrease, via a series of mergers or acquisitions, with both European and not European players, in order to enable greater economies of scale and cost-sharing relating to the developments of new products and innovative solutions, in particular for intrinsic safety.
The ATEX Directive 94/9/EC

- “New Approach” Directive
- Published on 19 April 1994 \((OJ L 100)\)
  - Corrected on 26 January 2000 \((OJ L 21)\) and 5 May 2000 \((OJ L 304)\)
- In force as from 1 July 2003
  - Amended on 31 October 2003 \((OJ L 284)\)
The ATEX Directive 94/9/EC: operation and perspectives in Europe and the World | 9

Organisational scheme for the ATEX 94/9/EC Directive

European Council and European Parliament
- Adopt Community legislation (co-decision)

Member States
- Implement ATEX Directive
- Appoint Notified Bodies
- Enforce the ATEX Directive (market surveillance)

European Commission (DG Enterprise & Industry)
- Proposes Community legislation
- Ensures correct application
- Mandates harmonised standards

ATEX Committee
- Commission + Member States
- Advises the Commission on measures to ensure correct application of the ATEX Directive

ATEX ADCO
- Administrative Co-operation Group
- Market surveillance

ATEX ADNO
- Administrative Notified Bodies Organization
- Market surveillance

ExNBG
- European ATEX Notified Bodies Group
- Ensures consistency of technical approach
- Makes Clarification Sheets

European Standardisation Organisations (CEN, CENELEC)
- Develop harmonised standards supporting the essential health and safety requirements of the ATEX Directive

CEN/ CENELEC Consultant

ATEX Industry / Manufacturers
- Apply the ATEX Directive
- Contribute to standards

ATEX Users
- ATEX products owners
- Trade unions
- Consumers
- Contribute to standards

ATEX 1999/92/EC User/Workplace Directive

DG Employment

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Implementation and operation

- Guidance documents:
  - **ATEX Guidelines** (currently 3rd edition - June 2009, updated May 2011)
  - **Consideration Papers** by the ATEX Standing Committee
  - **ExNBG Clarification Sheets** noted by the ATEX Standing Committee
Implementation and operation

- Consolidated minutes of the meetings of the Working Group of the ATEX Directive 94/9/EC Standing Committee from 1997 onwards

- CIRCA Interest Groups:
  - ATEX Directive (135 members)
  - ATEX Administrative Co-operation (27 Member States, 4 Candidate Countries, 2 EFTA Countries)
  - ATEX Group of Notified Bodies (63 Notified Bodies)
Implementation and operation

- **European Harmonised Standards** under the ATEX Directive 94/9/EC: 93 references published on the OJEU (June 2011)

<table>
<thead>
<tr>
<th>Harmonised Standards / ESO</th>
<th>European Standards</th>
<th>ISO Standards</th>
<th>IEC Standards</th>
<th>International Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEN</td>
<td>60</td>
<td>1</td>
<td>-</td>
<td>1,67 %</td>
</tr>
<tr>
<td>CENELEC</td>
<td>33</td>
<td>-</td>
<td>21</td>
<td>63,64 %</td>
</tr>
<tr>
<td>Total ATEX</td>
<td>93</td>
<td>22</td>
<td></td>
<td>23,66 %</td>
</tr>
</tbody>
</table>
Implementation and operation

- Complaints/challenges:
  - **Formal Objections** to Harmonised Standards: none
  - **Safeguard Clauses** on Products: 2 (2007, 2011)
The ATEX Directive and the New Legislative Framework (NLF)

  - Regulation 764/2008
    • national technical rules on products (apply from 13 May 2009)
  - Regulation 765/2008
    • accreditation CABs, market surveillance, control on products from third countries, CE marking (apply from 1 January 2010)
  - Decision 768/2008/EC
    • common framework for the marketing of products, references for EU harmonisation legislation
The ATEX Directive and the New Legislative Framework (NLF)

• Revision or alignment?
  - **Revision**: no significant problems in operation, no urgent need for substantial modifications
  - **Alignment**: inclusion of the main elements of Decision 768/2008/EC with no substantial change in:
    • Scope
    • Classification of equipment-groups into categories
    • Essential Health and Safety Requirements
    • Conformity Assessment Procedures
The NLF-aligned ATEX Directive

• Main changes in the Proposal:
  ▪ Codification/recast: new denomination of the Directive (20xx/xx/EU)
  ▪ Recitals
  ▪ Horizontal definitions
  ▪ Obligations of economic operators (manufacturers, authorised representatives, importers and distributors) and traceability requirements
  ▪ Deletion of the Standing Committee, replaced by an Expert Working Group
  ▪ Specific marking of explosion protection (Ex-marking “the hexagon” (Ex)) alongside CE-marking
  ▪ Final and transitional provisions (transposition, transition period, validity of certificates, references…)
The NLF-aligned ATEX Directive

- Changes/harmonisation in terminology:
  - Harmonised standards (Regulation on European Standardisation)
  - Declaration of conformity (Decision 768/2008/EC)
  - CE-marking (Regulation 765/2008)
  - Conformity assessment procedures and modules
  - Notification of conformity assessment bodies
  - Market surveillance and safeguard procedures
The new ATEX Directive: timeframe

- **July-August 2011**: finalisation of text
- **October 2011**: translations into the EU official languages
- **October-November 2011**: formal adoption of the Commission Proposal and publication
- **November-December 2011**: transmission to the European Parliament and the Council
- **2012(?)**: co-decision procedure
- **2013(?)**: final adoption of the new Directive and publication
- **2013-2015(?)**: transition period
- **2015(?)**: application of the new Directive
Main principles of EU international activities on products

• Coherence and consistency of the EU legal framework and operative model, and its possible extension to other areas

• Ensuring the highest levels of health and safety:
  - Regulatory issues: technical regulations, standards and conformity assessment systems, intellectual property rights, government procurement…

• Competitiveness, economic growth and more jobs:
  - Facilitating global trade: free trade and free circulation, removing unnecessary barriers
  - Co-operation, assistance and development
EU regulatory policy: international aspects

- United Nations Economic Commission for Europe (UNECE)
- WTO Agreement on Technical Barriers to Trade (TBT)
- Agreements on Conformity Assessment and Acceptance of industrial products (ACAA)
- Mutual Recognition Agreements (MRA)
- Free Trade Agreements (FTA)
- Regulatory and Industrial Policy Dialogues
- Best Regulatory Practices (BRP)
- Technical Assistance
EU international activities in ATEX

- European Economic Area (EEA)
  - Liechtenstein, Norway
- Candidate Countries
  - Croatia, FYROMacedonia, Iceland, Turkey
- Mutual Recognition Agreements (MRA)
  - Switzerland
- Customs Union
  - Andorra, Monaco, San Marino, Turkey
- European Neighbourhood
  - Euro-Mediterranean Partnership (Albania, Algeria, Bosnia-Herzegovina, Croatia, Egypt, Israel, Jordan, Lebanon, Mauritania, Monaco, Montenegro, Morocco, Palestinian Authority, Syria, Tunisia, Turkey)
  - Eastern Partnership (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine)
- Other instruments
  - Australia, Brazil, Canada, China, India, Japan, Russia, South Africa, USA…
EU ATEX and UNECE SIEEEE

• Following up the “Proposal on international legal requirements for explosion protection” at UNECE since 2006 (meetings, reports, opinions…)

• Positive opinion on the basic objectives of the proposal and the Sector Initiative on Equipment for Explosive Environments (SIEEEE), as well as on the work carried out: Terms of Reference, Common Regulatory Objectives…
EU ATEX and UNECE SIEEEE

- Possible concerns/discussion points:
  - Compatibility between the EU system and the International Certification Scheme (IECEx)
    - Legal requirements (EHSRs) / Voluntary scheme
    - EU Declaration of Conformity / IECEx Certificate
    - Markings (CE, Ex, Ex)
  - European standardisation and international standardisation
    - Voluntary standards, European harmonisation and presumption of conformity
    - Joint development ESO-ISO-IEC
    - Regional options
  - Accreditation and recognition of third-part bodies
    - Conformity Assessment Bodies
    - Inspection Bodies
    - Test Houses
  - Validity of Certificates
  - Market surveillance
    - Public authorities / Private bodies
Open conclusions

• Benefits of global harmonisation promoted and adopted at UNECE level
• Some positive cases:
  ▪ Emissions from Non-road Mobile Machinery Directive 97/68/EC considers UNECE regulations as alternative means of compliance
  ▪ Automotive sector: specific Agreement between contracting parties allows the adoption of global standards which are “transposed” at national/EU level
• Positive perspectives also for the ATEX sector, when all possible concerns/discussion points can be clarified and agreed
Many thanks for your attention!

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