ATEX / Cenelec







What is ATEX?

- ATEX: <u>ATmospheres EXplosibles</u> (Directive 94/9/EC)
 - ➤ Introduced under Article 100a of the Treaty of Rome
 - ➤ Single European market in goods and services
 - ➤ For mechanical and electrical equipment and protective systems intended for use in **potentially explosive atmospheres**
 - Under ground
 - On surface
 - ➤ Provides Essential Health and Safety Requirements (EHSRs)
- Mandatory in EU and EFTA countries from 1st July 2003 on
 - Replaces existing directives in EU
 - Cenelec
 - Factory Mutual (FM)





Impact on Motorola products

- Up-revision of EN50020 and EN50014
 - ➤ EN50020/EN50014 define requirements for IS (Intrinsically Safe) products e.g. GP900 Cenelec)
 - Reduction of max. circuitry capacitance
 - ⇒ Other protection class
 - New electrostatic requirements
 - ⇒ Usage of a leather case
- Re-approval at BASEEFA



II 2 G EEx ib IIB T4

Approval no.: BASEEFA 02 ATEX 0121

(preliminarily)

| Group | I Mining II other (chemical industry, refineries) |
|--------|---|
| Zone | ignitable atmoshpere often ignitable atmoshpere sometimes |
| | 2 ignitable atmoshpere seldom |
| Sector | G Gas |
| | D Dust |







Impact on Motorola products

GP900 /GP1200 /MTS2000 Cenelec EEx ib IIC T4

- ➤ Equipment placed on the market before 1st July 2003 <u>doesn't</u> need to comply to ATEX and retain their original classification
- ➤ Last time buy opportunity by 17th May 2003
- ➤ Delivery by 30. June 2003
- Products to be supported in service with replacement batteries, accessories and parts after 1st July 2003

GP900 / GP1200 / MTS 2000

- > ATEX approval by 30th June 2003
- ➤ Protection class (Ex) II 2 G EEx ib IIB T4
- No mechanical and electrical changes
- Use of leather carry case mandatory





Cenelec / ATEX Certification

Max. Temperature

| | T1: 450°C | T2: 300°C | T3: 200°C | T4: 135°C | T5: 100°C | T6: 85°C |
|-----|------------------------|--------------------|----------------|--------------|-----------------------|------------------|
| I | Methane | | | | | |
| IIA | Acetone | Ethyl alcohol | Benzine | Acetaldehyde | | |
| | Ethane | I-amyl acetate | Dies el fuel | Ethyl ether | | |
| | Ethyl acetate | n-butane | Airc raft fuel | | | |
| | Ammonia | n-butyl alcohol | Heating Oil | | | |
| | Benzene (pure) | | n-hexane | | | |
| | Acetic acid | | | | | |
| | Carbon Monoxide | | | | | |
| | Methanol | | | | | |
| | Propane | | | | | |
| | Toluene | | | | | |
| ПВ | Town Gas (Coal Gas) | Ethylene | | | | |
| ПС | Hydrogen | Acetylene | | | Carbon dis ulphide | Ethyl nitrate |

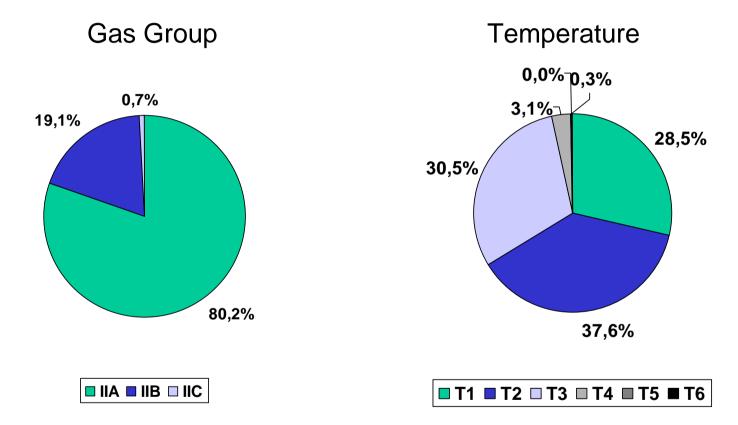
(higher classes cover lower classes)

Country specific interpretation of Directives may be subject to change

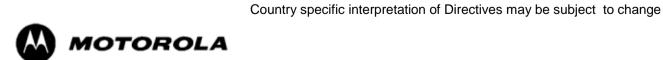




Applications in Gas Group II



Source: Günter Kämper VDI





FAQ' s (1)

- Can I buy Cenelec or FM Radios in EU/EFTA countries after 30. June 2003 ?
 - NO. Exception: For use on <u>seagoing</u> vessels, <u>mobile</u> offshore units or export to non-EU/EFTA countries.
- Where can I find further information on ATEX ?
 - ⇒ http://europe.eu.int/comm/enterprise/atex/index.htm
- What is the price for the new ATEX radios ?
 - ⇒ Same price as Cenelec radios.
 (Radio package will contain leather case instead of belt clip)





FAQ' s (2)

- What can I do, if protection class EEx ib IIC T4 is required?
 - ⇒ Last Time Buy of Cenelec Radios by 17. May 2003 (Delivery to dealer/distributor by 30. June 2003)
- How do we support customers requesting FM radios ?
 - ⇒ Last Time Buy of FM Radios by 17. May 2003 (Delivery to dealer/distributor by 30. June 2003)
- Is the dealer/distributor allowed to sell radios from stock after 30. June 2003 ?
 - ⇒ Yes. (see http://europe.eu.int/comm/enterprise/atex/index.htm)





FAQ' s (3)

- Is it allowed to use Cenelec approved accessories on ATEX Radios?
 - ⇒ No. Motorola will offer ATEX approved accessories.
- How can I identify an ATEX product ?
 - ⇒ ATEX products carry ATEX labels
 - ⇒ Different item numbers (if neccessary)



