ANNEX I

ARTICLES CONSIDERED IN THE RELEVANT UNITED NATIONS RECOMMENDATIONS TO BE PYROTECHNIC OR AMMUNITION

UN No	NAME and DESCRIPTION	CLASS/DIVISION	GLOSSARY (to be used as a guide for information only)
Group G			
0009	Ammunition, Incendiary with or without burster, expelling charge or propelling charge	1.2 G	Ammunition Generic term related mainly to articles of military application consisting of all kind of bombs, grenades, rockets, mines, projectiles and other similar devices. Ammunition, Incendiary Ammunition containing incendiary substance. Except when the composition is an explosive per se, it also contains one or more of the following: a propelling charge with primer and igniter charge; a fuze with burster or expelling charge.
0010	Ammunition, Incendiary with or without burster, expelling charge or propelling charge	1.3 G	See Entry for UN No 0009
0015	Ammunition, Smoke with or without burster, expelling charge or propelling charge	1.2 G	Ammunition, Smoke Ammunition containing smoke-producing substance. Except when the substance is an explosive per se, the ammunition also contains one or more of the following: a propelling charge with primer and igniter charge; a

			fuze with burster or expelling charge.
0016	Ammunition, Smoke with or without burster, expelling charge or propelling charge	1.3 G	See Entry for UN No 0015
0018	Ammunition, Tear-producing with burster, expelling charge or propelling charge	1.2 G	Ammunition, Tear- producing with burster, expelling charge or propelling charge Ammunition containing tear- producing substance. It also contains one or more of the following: a pyrotechnic substance; a propelling charge with primer and igniter charge; a fuze with burster or expelling charge.
0019	Ammunition, Tear- producing with burster, expelling charge or propelling charge	1.3 G	See Entry for UN No 0018
0039	Bombs, photo-flash	1.2 G	Bombs Explosive articles which are dropped from aircraft. They may contain a flammable liquid with bursting charge, a photo-flash composition or a bursting charge. The term includes: bombs, photo-flash.
0049	Cartridges, Flash	1.1 G	Cartridges, Flash Articles consisting of a casing, a primer and flash powder, all assembled in one piece ready for firing.

0050	Cartridges, Flash	1.3 G	See Entry for UN No 0049
0054	Cartridges, Signal	1.3 G	Cartridges, Signal Articles designed to fire coloured flares or other signals from signal pistols, etc.
0066	Cord, Igniter	1.4 G	Cord, Igniter Article consisting of textile yarns covered with black powder or another fast burning pyrotechnic composition and of a flexible protective covering; or it consists of a core of black powder surrounded by a flexible woven fabric: It burns progressively along its length with an external flame and is used to transmit ignition from a device to a charge.
0092	Flares, Surface	1.3 G	Flares Articles containing pyrotechnic substances which are designed for use to illuminate, identify, signal or warn.
0093	Flares, Aerial	1.3 G	See Entry for UN No 0092
0101	Fuse, non-detonating	1.3 G	Fuse/Fuze Although these two words have a common origin (French fusée, fusil) and are sometimes considered to be different spellings, it is useful to maintain the convention that fuse refers to a cord-like igniting device whereas fuze refers to a device used in ammunition

			which incorporates mechanical, electrical, chemical or hydrostatic components to initiate a train by deflagration or detonation. Fuse, instantaneous, non-detonating (quick-match) Article consisting of cotton yarns impregnated with fine black powder (quickmatch). It burns with an external flame and is used in ignition trains for fireworks, etc.
0103	Fuse, Igniter, tubular, metal clad	1.4 G	Fuse, igniter, tubular, metal clad Article consisting of a metal tube with a core of deflagrating explosive.
0171	Ammunition, illuminating with or without burster, expelling charge or propelling charge	1.2 G	Ammunition, illuminating with or without burster, expelling charge or propelling charge Ammunition designed to produce a single source of intense light for lighting up an area. The term includes illuminating cartridges, grenades and projectiles; and illuminating and target identification bombs.
0191	Signal devices, hand	1.4 G	Articles designed to produce signals.
0192	Signals, railway track, explosive	1.1 G	See Entry for UN No 0191
0194	Signals, distress, ship	1.1 G	See Entry for UN No 0191

0195	Signals, distress, ship	1.3 G	See Entry for UN No 0191
0196	Signals, smoke	1.1 G	See Entry for UN No 0191
0197	Signals, smoke	1.4 G	See Entry for UN No 0191
0212	Tracers for ammunition	1.3 G	Tracers for ammunition Sealed articles containing pyrotechnic substances, designed to reveal the trajectory of a projectile.
0254	Ammunition, illuminating with or without burster, expelling charge or propelling charge	1.3 G	See Entry for UN No 0171
0297	Ammunition, illuminating with or without burster, expelling charge or propelling charge	1.4 G	See Entry for UN No 0254
0299	Bombs, photo-flash	1.3 G	See Entry for UN No 0039
0300	Ammunition, incendiary with or without burster, expelling charge or propelling charge	1.4 G	See Entry for UN No 0009
0301	Ammunition, tear- producing with burster, expelling charge	1.4 G	See Entry for UN No 0018
0303	Ammunition, smoke with or without burster, expelling charge	1.4 G	See Entry for UN No 0015
0306	Tracers for ammunition	1.4 G	See Entry for UN No 0212
0312	Cartridges, signal	1.4 G	Cartridges, signal Articles designed to fire coloured flares

			or other signals from signal pistols.
0313	Signals, smoke	1.2 G	See Entry for UN No 0195
0318	Grenades, practice, hand or rifle	1.3 G	Grenades hand or rifle Articles which are designed to be thrown by hand or to be projected by a rifle. The term includes: Grenades practice, hand or rifle.
0319	Primers, tubular	1.3 G	Primers, tubular Articles consisting of a primer for ignition and an auxiliary charge of deflagrating explosive such as black powder used to ignite the propelling charge in a cartridge case, e.g. cannon.
0320	Primers, tubular	1.4 G	See Entry for UN No 0319
0333	Fireworks	1.1 G	Fireworks Pyrotechnic articles designed for entertainment.
0334	Fireworks	1.2 G	See Entry for UN No 0333
0335	Fireworks	1.3 G	See Entry for UN No 0333
0336	Fireworks	1.4 G	See Entry for UN No 0333
0362	Ammunition, practice	1.4 G	Ammunition, practice Ammunition without a main bursting charge, containing a burster or expelling charge. Normally it also contains a fuze and a propelling charge.
0363	Ammunition, proof	1.4 G	Ammunition, proof Ammunition containing

			pyrotechnic substances, used to test the performance or strength of new ammunition, weapon component or assemblies.
0372	Grenades, practice, hand or rifle	1.2 G	See Entry for UN No 0318
0373	Signal devices, hand	1.4 S	See Entry for UN No 0191
0403	Flares, aerial	1.4 G	See Entry for UN No 0092
0418	Flares, surface	1.2 G	See Entry for UN No 0092
0419	Flares, surface	1.1 G	See Entry for UN No 0092
0420	Flares, aerial	1.1 G	See Entry for UN No 0092
0421	Flares, aerial	1.2 G	See Entry for UN No 0092
0424	Projectiles, inert with tracer	1.3 G	Projectiles Articles such as a shell or bullet which are projected from a cannon or other artillery gun, rifle or other small arm. They may be inert, with or without tracer, or may contain a burster or expelling charge or a bursting charge. The term includes: Projectiles, inert, with tracer; projectiles with burster or expelling charge; projectiles with bursting charge.
0425	Projectiles, inert with tracer	1.4 G	See Entry for UN No 0424
0428	Articles, pyrotechnic for technical purposes	1.1 G	Articles, pyrotechnic for technical purposes Articles which contain pyrotechnic substances and are

			used for technical purposes such as heat generation, gas generation, theatrical effects, etc. The term excludes the following articles which are listed separately: all ammunition; cartridges, signal; cutters, cable, explosive; fireworks; flares, aerial; flares, surface; release devices, explosive; rivets, explosive; rivets, explosive; signal devices, hand; signals, distress; signals, railway track, explosive; signals, smoke.
0429	Articles, pyrotechnic for technical purposes	1.2 G	See Entry for UN No 0428
0430	Articles, pyrotechnic for technical purposes	1.3 G	See Entry for UN No 0428
0431	Articles, pyrotechnic for technical purposes	1.4 G	See Entry for UN No 0428
0434	Projectiles with burster or expel-ling charge	1.2 G	Projectiles Articles such as a shell or bullet which are projected from a cannon or other artillery gun, rifle or other small arm. They may be inert, with or without tracer, or may contain a burster or expelling charge or a bursting charge. The term includes: projectiles, inert, with tracer; projectiles with burster or expelling charge; projectiles with bursting charge.
0435	Projectiles with burster or expelling charge	1.4 G	See Entry for UN No 0434

0452	Grenades, practice, hand or rifle	1.4 G	See Entry for UN No 0372
0487	Signal, smoke	1.3 G	See Entry for UN No 0194
0488	Ammunition, practice	1.3 G	Ammunition, practice Ammunition without a main bursting charge, containing a burster or expelling charge. Normally it also contains a fuze and a propelling charge. The term excludes the following articles which are listed separately: Grenades, practice.
0492	Signals, railway track, explosive	1.3 G	See Entry for UN No 0194
0493	Signals, railway track, explosive	1.4 G	See Entry for UN No 0194
0503	Air bag inflators, or Airbag modules, or seat belt pre- tensioners,	1.4 G	
Group S	,	1	,
0110	Grenades, practice, hand or rifle	1.4 S	See Entry for UN No 0318
0193	Signals, railway track, explosive	1.4 S	See Entry for UN No 0194
0337	Fireworks	1.4 S	See Entry for UN No 0334
0345	Projectiles, inert with tracer	1.4 S	Projectiles Articles such as a shell or bullet which are projected from a cannon or other artillery gun, rifle or other small arm. They may be inert, with or without tracer, or may contain a burster or expelling charge or a bursting charge.
0376	Primers, tubular	1.4 S	See Entry for UN No 0319

0404	Flares, aerial	1.4 S	See Entry for UN No 0092
0405	Cartridges, signal	1.4 S	Cartridges, Signal Articles designed to fire coloured flares or other signals from signal pistols, etc.
0432	Articles, pyrotechnic or technical purpose	1.4 S	

ANNEX II

ESSENTIAL SAFETY REQUIREMENTS

I.General requirements

- 1. Each explosive must be designed, manufactured and supplied in such a way as to present a minimal risk to the safety of human life and health, and to prevent damage to property and the environment under normal, foreseeable conditions, in particular as regards the safety rules and standard practices until it is used.
- 2. Each explosive must attain the performance characteristics specified by the manufacturer in order to ensure maximum safety and reliability.
- 3. Each explosive must be designed and manufactured in such a way that when appropriate techniques are employed it can be disposed of in a manner which minimises effects on the environment.

II. Special requirements

- 1. As a minimum, the following information and properties, where appropriate, must be considered or tested:
- (a) design and characteristic properties, including chemical composition, degree of homogeneity and, where appropriate, dimensions and grain size distribution;
- (b) the physical and chemical stability of the explosive in all environmental conditions to which it may be exposed;
- (c) sensitiveness to impact and friction;
- (d) compatibility of all components as regards their physical and chemical stability;
- (e) the chemical purity of the explosive;
- (f) resistance of the explosive against influence of water where it is intended to be used in humid or wet conditions and where its safety or reliability may be adversely affected by water;
- (g) resistance to low and high temperatures, where the explosive is intended to be kept or used at such temperatures and its safety or reliability may be adversely affected by cooling or heating of a component or of the explosive as a whole;
- (h) the suitability of the explosive for use in hazardous environments (e.g. firedamp atmospheres, hot masses) if it is intended to be used under such conditions;

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- safety features intended to prevent untimely or inadvertent initiation or ignition; (i)
- the correct loading and functioning of the explosive when used for its intended (j) purpose;
- suitable instructions and, where necessary, markings in respect of safe handling, (k) storage, use and disposal;
- the ability of the explosive, its wrapping or other components to withstand (1) deterioration during storage until the 'use by' date specified by the manufacturer;
- (m) specification of all devices and accessories needed for reliable and safe functioning of the explosive.
- 2. Each explosive shall be tested under realistic conditions. If this is not possible in a laboratory, the tests shall be carried out in the conditions in which the explosive is to be used.
- 3. Requirements for the groups of explosives
- 3.1. Blasting explosives shall also comply with the following requirements:
- (a) the proposed method of initiation must ensure safe, reliable and complete detonation or deflagration as appropriate, of the blasting explosive. In the particular case of black powder, it is the capacity as regards deflagration which shall be checked;
- blasting explosives in cartridge form must transmit the detonation safely and reliably (b) from one end of the train of cartridges to the other;
- the fumes produced by blasting explosives intended for underground use may contain (c) carbon monoxide, nitrous gases, other gases, vapours or airborne solid residues only in quantities which do not impair health under normal operating conditions.
- 3.2. Detonating cords, safety fuses, other fuses and shock tubes shall also comply with the following requirements:
- the covering of detonating cords, safety fuses, other fuses and shock tubes must be (a) of adequate mechanical strength and adequately protect the explosive filling when exposed to normal mechanical stress;
- the parameters for the burning times of safety fuses must be indicated and must be (b) reliably met:
- (c) detonating cords must be capable of being reliably initiated, be of sufficient initiation capability and comply with requirements as regards storage even in particular climatic conditions.
- 3.3. Detonators (including delay detonators) and relays shall also comply with the following requirements:
- (a) detonators must reliably initiate the detonation of the blasting explosives which are intended to be used with them under all foreseeable conditions of use;
- delay connectors for detonating cords must be reliably initiated; (b)
- (c) the initiation capability must not be adversely affected by humidity;
- the delay times of delay detonators must be sufficiently uniform to ensure that the (d) probability of overlapping of the delay times of adjacent time steps is insignificant;

- (e) the electrical characteristics of electric detonators must be indicated on the packaging (e.g. no-fire current, resistance);
- (f) the wires of electric detonators must be of sufficient insulation and mechanical strength including the solidity of the link to the detonator, taking account of their intended use.
- 3.4. Propellants and rocket propellants shall also comply with the following requirements:
- (a) these materials must not detonate when used for their intended purpose;
- (b) propellants where necessary (e.g. those based on nitrocellulose) must be stabilised against decomposition;
- (c) solid rocket propellants, when in compressed or cast form, must not contain any unintentional fissures or gas bubbles which dangerously affect their functioning.

ANNEX III

CONFORMITY ASSESSMENT PROCEDURES

MODULE BEU-type examination

- 1. EU-type examination is the part of a conformity assessment procedure in which a notified body examines the technical design of an explosive and verifies and attests that the technical design of the explosive meets the requirements of this Directive that apply to it.
- 2. EU-type examination shall be carried out as an assessment of the adequacy of the technical design of the explosive through examination of the technical documentation and supporting evidence referred to in point 3, plus examination of a specimen, representative of the production envisaged, of the complete product (combination of production type and design type).
- 3. The manufacturer shall lodge an application for EU-type examination with a single notified body of his choice.

The application shall include:

- (a) the name and address of the manufacturer and, if the application is lodged by the authorised representative, his name and address as well;
- (b) a written declaration that the same application has not been lodged with any other notified body;
- (c) the technical documentation. The technical documentation shall make it possible to assess the explosive's conformity with the applicable requirements of this Directive and shall include an adequate analysis and assessment of the risk(s). The technical documentation shall specify the applicable requirements and cover, as far as relevant for the assessment, the design, manufacture and operation of the explosive. The technical documentation shall contain wherever applicable, at least the following elements:
 - (i) a general description of the explosive;

- (ii) conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.;
- (iii) descriptions and explanations necessary for the understanding of those drawings and schemes and the operation of the explosive;
- (iv) a list of the harmonised standards applied in full or in part the references of which have been published in the *Official Journal of the European Union* and, where those harmonised standards have not been applied, descriptions of the solutions adopted to meet the essential safety requirements of this Directive, including a list of other relevant technical specifications applied. In the event of partly applied harmonised standards, the technical documentation shall specify the parts which have been applied;
- (v) results of design calculations made, examinations carried out, etc.;
- (vi) test reports;
- (d) the specimens representative of the production envisaged. The notified body may request further specimens if needed for carrying out the test programme;
- (e) the supporting evidence for the adequacy of the technical design solution. This supporting evidence shall mention any documents that have been used, in particular where the relevant harmonised standards have not been applied in full. The supporting evidence shall include, where necessary, the results of tests carried out in accordance with other relevant technical specifications by the appropriate laboratory of the manufacturer, or by another testing laboratory on his behalf and under his responsibility.
- 4. The notified body shall:

For the explosive:

4.1. examine the technical documentation and supporting evidence to assess the adequacy of the technical design of the explosive.

For the specimen(s):

- 4.2. verify that the specimen(s) have been manufactured in conformity with the technical documentation and identify the elements which have been designed in accordance with the applicable provisions of the relevant harmonised standards, as well as the elements which have been designed in accordance with other relevant technical specifications;
- 4.3. carry out appropriate examinations and tests, or have them carried out, to check whether, where the manufacturer has chosen to apply the solutions in the relevant harmonised standards, these have been applied correctly;
- 4.4. carry out appropriate examinations and tests, or have them carried out, to check whether, where the solutions in the relevant harmonised standards have not been applied, the solutions adopted by the manufacturer applying other relevant technical specifications meet the corresponding essential safety requirements of this Directive;
- 4.5. agree with the manufacturer on a location where the examinations and tests will be carried out.
- 5. The notified body shall draw up an evaluation report that records the activities undertaken in accordance with point 4 and their outcomes. Without prejudice to

its obligations vis-à-vis the notifying authorities, the notified body shall release the content of that report, in full or in part, only with the agreement of the manufacturer.

6. Where the type meets the requirements of this Directive that apply to the explosive concerned, the notified body shall issue an EU-type examination certificate to the manufacturer. That certificate shall contain the name and address of the manufacturer, the conclusions of the examination, the conditions (if any) for its validity and the necessary data for identification of the approved type. The EU-type examination certificate may have one or more annexes attached.

The EU-type examination certificate and its annexes shall contain all relevant information to allow the conformity of manufactured explosives with the examined type to be evaluated and to allow for in-service control.

Where the type does not satisfy the applicable requirements of this Directive, the notified body shall refuse to issue an EU-type examination certificate and shall inform the applicant accordingly, giving detailed reasons for its refusal.

7. The notified body shall keep itself apprised of any changes in the generally acknowledged state of the art which indicate that the approved type may no longer comply with the applicable requirements of this Directive, and shall determine whether such changes require further investigation. If so, the notified body shall inform the manufacturer accordingly.

The manufacturer shall inform the notified body that holds the technical documentation relating to the EU-type examination certificate of all modifications to the approved type that may affect the conformity of the explosive with the essential safety requirements of this Directive or the conditions for validity of that certificate. Such modifications shall require additional approval in the form of an addition to the original EU-type examination certificate.

8. Each notified body shall inform its notifying authority concerning the EU-type examination certificates and/or any additions thereto which it has issued or withdrawn, and shall, periodically or upon request, make available to its notifying authority the list of such certificates and/or any additions thereto refused, suspended or otherwise restricted.

Each notified body shall inform the other notified bodies concerning the EU-type examination certificates and/or any additions thereto which it has refused, withdrawn, suspended or otherwise restricted, and, upon request, concerning such certificates and/or additions thereto which it has issued.

The Commission, the Member States and the other notified bodies may, on request, obtain a copy of the EU-type examination certificates and/or additions thereto. On request, the Commission and the Member States may obtain a copy of the technical documentation and the results of the examinations carried out by the notified body. The notified body shall keep a copy of the EU-type examination certificate, its annexes and additions, as well as the technical file including the documentation submitted by the manufacturer, until the expiry of the validity of that certificate.

- 9. The manufacturer shall keep a copy of the EU-type examination certificate, its annexes and additions together with the technical documentation at the disposal of the national authorities for 10 years after the explosive has been placed on the market.
- 10. The manufacturer's authorised representative may lodge the application referred to in point 3 and fulfil the obligations set out in points 7 and 9, provided that they are specified in the mandate.

MODUL Conformity to type based on internal production control plus supervised product C 2 checks at random intervals

1. Conformity to type based on internal production control plus supervised product checks at random intervals is the part of a conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2, 3 and 4, and ensures and declares on his sole responsibility that the explosives concerned are in conformity with the type described in the EU-type examination certificate and satisfy the requirements of this Directive that apply to them.

2. Manufacturing

The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure conformity of the manufactured explosives with the type described in the EU-type examination certificate and with the requirements of this Directive that apply to them.

3. *Product checks*

A notified body, chosen by the manufacturer, shall carry out product checks or have them carried out at random intervals determined by that body, in order to verify the quality of the internal checks on the explosive, taking into account, inter alia, the technological complexity of the explosives and the quantity of production. An adequate sample of the final products, taken on site by the notified body before the placing on the market, shall be examined and appropriate tests as identified by the relevant parts of the harmonised standards and/or equivalent tests set out in other relevant technical specifications, shall be carried out to check the conformity of the explosive with the type described in the EU-type examination certificate and with the relevant requirements of this Directive. Where a sample does not conform to the acceptable quality level, the notified body shall take appropriate measures.

The acceptance sampling procedure to be applied is intended to determine whether the manufacturing process of the explosive performs within acceptable limits, with a view to ensuring conformity of the explosive.

The manufacturer shall, under the responsibility of the notified body, affix the notified body's identification number during the manufacturing process.

- 4. *CE marking and EU declaration of conformity*
- 4.1. The manufacturer shall affix the CE marking to each individual explosive that is in conformity with the type described in the EU-type examination certificate and satisfies the applicable requirements of this Directive.
- 4.2. The manufacturer shall draw up a written EU declaration of conformity for each explosive type and keep it at the disposal of the national authorities for 10 years after the explosive has been placed on the market. The EU declaration of conformity shall identify the explosive type for which it has been drawn up.

A copy of the EU declaration of conformity shall be made available to the relevant authorities upon request.

5. *Authorised representative*

The manufacturer's obligations set out in point 4 may be fulfilled by his authorised representative, on his behalf and under his responsibility, provided that they are specified in the mandate.

MODULEConformity to type based on quality assurance of the production process D

1. Conformity to type based on quality assurance of the production process is the part of a conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2 and 5, and ensures and declares on his sole responsibility that the explosives concerned are in conformity with the type described in the EU-type examination certificate and satisfy the requirements of this Directive that apply to them.

2. Manufacturing

The manufacturer shall operate an approved quality system for production, final product inspection and testing of the explosives concerned as specified in point 3, and shall be subject to surveillance as specified in point 4.

- 3. Quality system
- 3.1. The manufacturer shall lodge an application for assessment of his quality system with the notified body of his choice, for the explosives concerned.

The application shall include:

- (a) the name and address of the manufacturer and, if the application is lodged by the authorised representative, his name and address as well;
- (b) a written declaration that the same application has not been lodged with any other notified body;
- (c) all relevant information for the explosive category envisaged;
- (d) the documentation concerning the quality system;
- (e) the technical documentation of the approved type and a copy of the EU-type examination certificate.
- 3.2. The quality system shall ensure that the explosives are in conformity with the type described in the EU-type examination certificate and comply with the requirements of this Directive that apply to them.

All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. The quality system documentation shall permit a consistent interpretation of the quality programmes, plans, manuals and records.

It shall, in particular, contain an adequate description of:

- (a) the quality objectives and the organisational structure, responsibilities and powers of the management with regard to product quality;
- (b) the corresponding manufacturing, quality control and quality assurance techniques, processes and systematic actions that will be used;
- (c) the examinations and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out;
- (d) the quality records, such as inspection reports and test data, calibration data, qualification reports on the personnel concerned, etc.;

- (e) the means of monitoring the achievement of the required product quality and the effective operation of the quality system.
- 3.3. The notified body shall assess the quality system to determine whether it satisfies the requirements referred to in point 3.2.

It shall presume conformity with those requirements in respect of the elements of the quality system that comply with the corresponding specifications of the relevant harmonised standard.

In addition to experience in quality management systems, the auditing team shall have at least one member with experience of evaluation in the relevant product field and product technology concerned, and knowledge of the applicable requirements of this Directive. The audit shall include an assessment visit to the manufacturer's premises. The auditing team shall review the technical documentation referred to in point (e) of point 3.1 to verify the manufacturer's ability to identify the relevant requirements of this Directive and to carry out the necessary examinations with a view to ensuring compliance of the explosive with those requirements.

The decision shall be notified to the manufacturer. The notification shall contain the conclusions of the audit and the reasoned assessment decision.

- 3.4. The manufacturer shall undertake to fulfil the obligations arising out of the quality system as approved and to maintain it so that it remains adequate and efficient.
- 3.5. The manufacturer shall keep the notified body that has approved the quality system informed of any intended change to the quality system.

The notified body shall evaluate any proposed changes and decide whether the modified quality system will continue to satisfy the requirements referred to in point 3.2 or whether a reassessment is necessary.

It shall notify the manufacturer of its decision. The notification shall contain the conclusions of the examination and the reasoned assessment decision.

- 4. *Surveillance under the responsibility of the notified body*
- 4.1. The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved quality system.
- 4.2. The manufacturer shall, for assessment purposes, allow the notified body access to the manufacture, inspection, testing and storage sites and shall provide it with all necessary information, in particular:
- (a) the quality system documentation;
- (b) the quality records, such as inspection reports and test data, calibration data, qualification reports on the personnel concerned, etc.
- 4.3. The notified body shall carry out periodic audits to make sure that the manufacturer maintains and applies the quality system and shall provide the manufacturer with an audit report.
- 4.4. In addition, the notified body may pay unexpected visits to the manufacturer. During such visits the notified body may, if necessary, carry out product tests, or have them carried out, in order to verify that the quality system is functioning correctly. The notified body shall provide the manufacturer with a visit report and, if tests have been carried out, with a test report.
- 5. *CE marking and EU declaration of conformity*

- 5.1. The manufacturer shall affix the CE marking, and, under the responsibility of the notified body referred to in point 3.1, the latter's identification number to each individual explosive that is in conformity with the type described in the EU-type examination certificate and satisfies the applicable requirements of this Directive.
- 5.2. The manufacturer shall draw up a written EU declaration of conformity for each explosive type and keep it at the disposal of the national authorities for 10 years after the explosive has been placed on the market. The EU declaration of conformity shall identify the explosive type for which it has been drawn up.

A copy of the EU declaration of conformity shall be made available to the relevant authorities upon request.

- 6. The manufacturer shall, for a period ending 10 years after the explosive has been placed on the market, keep at the disposal of the national authorities:
- (a) the documentation referred to in point 3.1;
- (b) the information relating to the change referred to in point 3.5, as approved;
- (c) the decisions and reports of the notified body referred to in points 3.5, 4.3 and 4.4.
- 7. Each notified body shall inform its notifying authority of quality system approvals issued or withdrawn, and shall, periodically or upon request, make available to its notifying authority the list of quality system approvals refused, suspended or otherwise restricted.

Each notified body shall inform the other notified bodies of quality system approvals which it has refused, suspended, withdrawn or otherwise restricted, and, upon request, of quality system approvals which it has issued.

8. *Authorised representative*

The manufacturer's obligations set out in points 3.1, 3.5, 5 and 6 may be fulfilled by his authorised representative, on his behalf and under his responsibility, provided that they are specified in the mandate.

$\label{eq:module} \begin{tabular}{ll} MODUL \begin{tabular}{ll} \textbf{Conformity to type based on product quality assurance} \\ E \end{tabular}$

1. Conformity to type based on product quality assurance is that part of a conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2 and 5, and ensures and declares on his sole responsibility that the explosives concerned are in conformity with the type described in the EU-type examination certificate and satisfy the requirements of this Directive that apply to them.

2. Manufacturing

The manufacturer shall operate an approved quality system for final product inspection and testing of the explosives concerned as specified in point 3 and shall be subject to surveillance as specified in point 4.

- 3. *Quality system*
- 3.1. The manufacturer shall lodge an application for assessment of his quality system with the notified body of his choice, for the explosives concerned.

The application shall include:

- (a) the name and address of the manufacturer and, if the application is lodged by the authorised representative, his name and address as well;
- (b) a written declaration that the same application has not been lodged with any other notified body;
- (c) all relevant information for the explosive category envisaged;
- (d) the documentation concerning the quality system;
- (e) the technical documentation of the approved type and a copy of the EU-type examination certificate.
- 3.2. The quality system shall ensure compliance of the explosives with the type described in the EU-type examination certificate and with the applicable requirements of this Directive.

All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. This quality system documentation shall permit a consistent interpretation of the quality programmes, plans, manuals and records.

It shall, in particular, contain an adequate description of:

- (a) the quality objectives and the organisational structure, responsibilities and powers of the management with regard to product quality;
- (b) the examinations and tests that will be carried out after manufacture;
- (c) the quality records, such as inspection reports and test data, calibration data, qualification reports on the personnel concerned, etc.;
- (d) the means of monitoring the effective operation of the quality system.
- 3.3. The notified body shall assess the quality system to determine whether it satisfies the requirements referred to in point 3.2.

It shall presume conformity with those requirements in respect of the elements of the quality system that comply with the corresponding specifications of relevant harmonised standard.

In addition to experience in quality management systems, the auditing team shall have at least one member with experience of evaluation in the relevant product field and product technology concerned, and knowledge of the applicable requirements of this Directive. The audit shall include an assessment visit to the manufacturer's premises. The auditing team shall review the technical documentation referred to in point (e) of point 3.1, in order to verify the manufacturer's ability to identify the relevant requirements of this Directive and to carry out the necessary examinations with a view to ensuring compliance of the explosive with those requirements.

The decision shall be notified to the manufacturer. The notification shall contain the conclusions of the audit and the reasoned assessment decision.

- 3.4. The manufacturer shall undertake to fulfil the obligations arising out of the quality system as approved and to maintain it so that it remains adequate and efficient.
- 3.5. The manufacturer shall keep the notified body that has approved the quality system informed of any intended change to the quality system.

The notified body shall evaluate any proposed changes and decide whether the modified quality system will continue to satisfy the requirements referred to in point 3.2 or whether a reassessment is necessary.

It shall notify the manufacturer of its decision. The notification shall contain the conclusions of the examination and the reasoned assessment decision.

- 4. *Surveillance under the responsibility of the notified body*
- 4.1. The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved quality system.
- 4.2. The manufacturer shall, for assessment purposes, allow the notified body access to the manufacture, inspection, testing and storage sites and shall provide it with all necessary information, in particular:
- (a) the quality system documentation;
- (b) the quality records, such as inspection reports and test data, calibration data, qualification reports on the personnel concerned, etc.
- 4.3. The notified body shall carry out periodic audits to make sure that the manufacturer maintains and applies the quality system and shall provide the manufacturer with an audit report.
- 4.4. In addition, the notified body may pay unexpected visits to the manufacturer. During such visits the notified body may, if necessary, carry out product tests, or have them carried out, in order to verify that the quality system is functioning correctly. The notified body shall provide the manufacturer with a visit report and, if tests have been carried out, with a test report.
- 5. *CE marking and EU declaration of conformity*
- 5.1. The manufacturer shall affix the CE marking, and, under the responsibility of the notified body referred to in point 3.1, the latter's identification number to each individual explosive that is in conformity with the type described in the EU-type examination certificate and satisfies the applicable requirements of this Directive.
- 5.2. The manufacturer shall draw up a written EU declaration of conformity for each explosive type and keep it at the disposal of the national authorities for 10 years after the explosive has been placed on the market. The EU declaration of conformity shall identify the explosive type for which it has been drawn up.

A copy of the EU declaration of conformity shall be made available to the relevant authorities upon request.

- 6. The manufacturer shall, for a period ending 10 years after the explosive has been placed on the market, keep at the disposal of the national authorities:
- (a) the documentation referred to in point 3.1;
- (b) the information relating to the change referred to in point 3.5, as approved;
- (c) the decisions and reports of the notified body referred to in points 3.5, 4.3 and 4.4.
- 7. Each notified body shall inform its notifying authority of quality system approvals issued or withdrawn, and shall, periodically or upon request, make available to its

notifying authority the list of quality system approvals refused, suspended or otherwise restricted.

Each notified body shall inform the other notified bodies of quality system approvals which it has refused, suspended or withdrawn, and, upon request, of quality system approvals which it has issued.

8. *Authorised representative*

The manufacturer's obligations set out in points 3.1, 3.5, 5 and 6 may be fulfilled by his authorised representative, on his behalf and under his responsibility, provided that they are specified in the mandate.

$\begin{tabular}{ll} MODUL \label{table} \begin{tabular}{ll} Conformity to type based on product verification \\ \begin{tabular}{ll} F \end{tabular} \label{table}$

1. Conformity to type based on product verification is the part of a conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2, 5.1 and 6, and ensures and declares on his sole responsibility that the explosives concerned, which have been subject to the provisions of point 3, are in conformity with the type described in the EU-type examination certificate and satisfy the requirements of this Directive that apply to them.

2. *Manufacturing*

The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure conformity of the manufactured explosives with the approved type described in the EU-type examination certificate and with the requirements of this Directive that apply to them.

3. *Verification*

A notified body chosen by the manufacturer shall carry out appropriate examinations and tests in order to check the conformity of the explosives with the approved type described in the EU-type examination certificate and with the appropriate requirements of this Directive.

The examinations and tests to check the conformity of the explosives with the appropriate requirements shall be carried out, at the choice of the manufacturer, either by examination and testing of every product as specified in point 4 or by examination and testing of the explosives on a statistical basis as specified in point 5.

- 4. *Verification of conformity by examination and testing of every product*
- 4.1. All explosives shall be individually examined and appropriate tests set out in the relevant harmonised standard(s) and/or equivalent tests set out in other relevant technical specifications shall be carried out in order to verify conformity with the appropriate type described in the EU-type examination certificate and with the appropriate requirements of this Directive. In the absence of such a harmonised standard, the notified body concerned shall decide on the appropriate tests to be carried out.
- 4.2. The notified body shall issue a certificate of conformity in respect of the examinations and tests carried out, and shall affix its identification number to each approved explosive or have it affixed under its responsibility.

The manufacturer shall keep the certificates of conformity available for inspection by the national authorities for 10 years after the explosive has been placed on the market.

- 5. Statistical verification of conformity
- 5.1. The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure the homogeneity of each lot produced, and shall present his explosives for verification in the form of homogeneous lots.
- 5.2. A random sample shall be taken from each lot. All explosives in a sample shall be individually examined and appropriate tests set out in the relevant harmonised standard(s) and/or equivalent tests set out in other relevant technical specifications, shall be carried out in order to verify their conformity with the approved type described in the EU-type examination certificate and with the applicable requirements of this Directive and to determine whether the lot is accepted or rejected. In the absence of such a harmonised standard, the notified body concerned shall decide on the appropriate tests to be carried out.
- 5.3. If a lot is accepted, all explosives of the lot shall be considered approved, except for those explosives from the sample that have been found not to satisfy the tests.

The notified body shall issue a certificate of conformity in respect to the examinations and tests carried out, and shall affix its identification number to each approved explosive or have it affixed under its responsibility.

The manufacturer shall keep the certificates of conformity at the disposal of the national authorities for 10 years after the explosive has been placed on the market.

- 5.4. If a lot is rejected, the notified body or the competent authority shall take appropriate measures to prevent the placing on the market of that lot. In the event of the frequent rejection of lots the notified body may suspend the statistical verification and take appropriate measures.
- 6. *CE marking and EU declaration of conformity*
- 6.1. The manufacturer shall affix the CE marking, and, under the responsibility of the notified body referred to in point 3, the latter's identification number to each individual explosive that is in conformity with the approved type described in the EU-type examination certificate and satisfies the applicable requirements of this Directive.
- 6.2. The manufacturer shall draw up a written EU declaration of conformity for each explosive type and keep it at the disposal of the national authorities for 10 years after the explosive has been placed on the market. The EU declaration of conformity shall identify the explosive type for which it has been drawn up.

A copy of the EU declaration of conformity shall be made available to the relevant authorities upon request.

If the notified body referred to in point 3 agrees and under its responsibility, the manufacturer may also affix the notified body's identification number to the explosives.

If the notified body agrees and under its responsibility, the manufacturer may affix the notified body's identification number to the explosives during the manufacturing process.

7. *Authorised representative*

The manufacturer's obligations may be fulfilled by his authorised representative, on his behalf and under his responsibility, provided that they are specified in the mandate. An authorised representative may not fulfil the manufacturer's obligations set out in points 2 and 5.1.

MODUL Conformity based on unit verification G

1. Conformity based on unit verification is the conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2, 3 and 5, and ensures and declares on his sole responsibility that the explosive concerned, which has been subject to the provisions of point 4, is in conformity with the requirements of this Directive that apply to it.

2. Technical documentation

- 2.1. The manufacturer shall establish the technical documentation and make it available to the notified body referred to in point 4. The documentation shall make it possible to assess the explosive's conformity with the relevant requirements, and shall include an adequate analysis and assessment of the risk(s). The technical documentation shall specify the applicable requirements and cover, as far as relevant for the assessment, the design, manufacture and operation of the explosive. The technical documentation shall, wherever applicable, contain at least the following elements:
- (a) a general description of the explosive;
- (b) conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.;
- (c) descriptions and explanations necessary for the understanding of those drawings and schemes and the operation of the explosive;
- (d) a list of the harmonised standards applied in full or in part the references of which have been published in the *Official Journal of the European Union* and, where those harmonised standards have not been applied, descriptions of the solutions adopted to meet the essential safety requirements of this Directive, including a list of other relevant technical specifications applied. In the case of partly applied harmonised standards, the technical documentation shall specify the parts which have been applied;
- (e) results of design calculations made, examinations carried out, etc., and
- (f) test reports.
- 2.2. The manufacturer shall keep the technical documentation at the disposal of the relevant national authorities for 10 years after the explosive has been placed on the market.

3. *Manufacturing*

The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure conformity of the manufactured explosive with the applicable requirements of this Directive.

4. Verification

A notified body chosen by the manufacturer shall carry out appropriate examinations and tests, set out in the relevant harmonised standards and/or equivalent tests set out in other relevant technical specifications, to check the conformity of the explosive with the applicable requirements of this Directive, or have them carried out. In the absence of such a harmonised standard the notified body concerned shall decide on the appropriate tests to be carried out.

The notified body shall issue a certificate of conformity in respect of the examinations and tests carried out and shall affix its identification number to the approved explosive, or have it affixed under its responsibility.

The manufacturer shall keep the certificates of conformity at the disposal of the national authorities for 10 years after the explosive has been placed on the market.

- 5. *CE marking and EU declaration of conformity*
- 5.1. The manufacturer shall affix the CE marking and, under the responsibility of the notified body referred to in point 4, the latter's identification number to each explosive that satisfies the applicable requirements of this Directive.
- 5.2. The manufacturer shall draw up a written EU declaration of conformity and keep it at the disposal of the national authorities for 10 years after the explosive has been placed on the market. The EU declaration of conformity shall identify the explosive for which it has been drawn up.

A copy of the EU declaration of conformity shall be made available to the relevant authorities upon request.

6. *Authorised representative*

The manufacturer's obligations set out in points 2.2 and 5 may be fulfilled by his authorised representative, on his behalf and under his responsibility, provided that they are specified in the mandate.

ANNEX IV

EU DECLARATION OF CONFORMITY (No XXXX)(1)

- 1. No ... (product, type, batch or serial number):
- 2. Name and address of the manufacturer and, where applicable, his authorised representative:
- 3. This declaration of conformity is issued under the sole responsibility of the manufacturer.
- 4. Object of the declaration (identification of product allowing traceability):
- 5. The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:
- 6. References to the relevant harmonised standards used or references to the other technical specifications in relation to which conformity is declared:
- 7. The notified body ... (name, number) performed ... (description of intervention) and issued the certificate:
- 8. Additional information:

Signed for and on behalf of:

(place and date of issue):

(name, function) (signature):

ANNEX V

PART A

REPEALED DIRECTIVES WITH LIST OF THE SUCCESSIVE AMENDMENTS THERETO

(referred to in Article 53)

Council Directive 93/15/EEC (OJ L 121, 15.5.1993, p. 20).	
Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).	Only point (13) of Annex II
Regulation (EC) No 219/2009 of the European Parliament and of the Council (OJ L 87, 31.3.2009, p. 109).	Only point 2.2 of the Annex
Regulation (EU) No 1025/2012 of the European Parliament and of the Council (OJ L 316, 14.11.2012, p. 12).	Only point (b) of Article 26(1)
Commission Directive 2004/57/EC (OJ L 127, 29.4.2004, p. 73).	

PART B

TIME-LIMITS FOR TRANSPOSITION INTO NATIONAL LAW AND DATES OF APPLICATION

(referred to in Article 53)

Directive	Time-limit for transposition	Date of application
93/15/EEC (Articles 9, 10, 11, 12, 13 and 14)	30 September 1993	30 September 1993
93/15/EEC (all other articles)	30 June 1994	1 January 1995
2004/57/EC	31 December 2004	31 January 2005

ANNEX VI

CORRELATION TABLE

Directive 93/15/EEC	Directive 2004/57/EC	This Directive
Article 1(1)		Article 1(1)
Article 1(2)		Article 2(1)
Article 1(3)		Article 1(2)

Article 1(4)	Article 2(3) to (6), (8), (13) and (14)
_	Article 2(2), (7), (9) to (12) and (15) to (24)
Article 1(5)	Article 1(3)
Article 2(1)	Article 3
Article 2(2)	Article 4
Article 2(3)	Article 22
Article 3	Article 4 and Article 5(1)
_	Article 5(2) to (8)
_	Article 6
_	Article 7
_	Article 8
_	Article 9
	Article 10
Article 4(1)	Article 19
Article 4(2)	<u> </u>
Article 5	Article 43(3)
Article 6(1)	Article 20
_	Article 21
_	Articles 24 to 27
Article 6(2)	Articles 28 to 40
Article 7(1)	Articles 22 and 23
Article 7(2)	Article 22
Article 7(3)	Article 22
_	Article 41
Article 8(1)	Articles 42 and 44
Article 8(2)	Article 43
Article 8(3)	Article 45
Article 9(1)	Article 11(1)
Article 9(2)	<u> </u>
Article 9(3)	Article 11(2)
Article 9(4)	Article 11(3)
Article 9(5)	Article 11(4)
Article 9(6)	Article 11(6)

Article 9(7)		Article 11(5)
Article 9(8)		Article 11(7)
Article 9(9)		Article 11(8)
Article 10(1)		Article 12(1)
Article 10(2)		Article 12(2)
Article 10(3)		Article 12(3)
Article 10(4)		Article 12(4)
Article 10(5)		Article 12(5)
Article 11		Article 13
Article 12(1)		Article 14(1)
Article 12(2)		Article 14(2)
Article 13(1)		Article 49(1)
Article 13(2)		_
Article 13(3)		Articles 46 and 47
_		Article 48
Article 13(4)		Article 49(2) to (5)
Article 13(5)		Articles 46 and 47
Article 14, first paragraph		Article 16
Article 14, second paragraph		Article 15(1) and (4)
Article 14, third paragraph		Article 15(2) and (4)
Article 14, fourth paragraph		Article 15(3)
Article 15		_
Article 16		Article 17
Article 17		Article 50
Article 18		Article 18
Article 19		Articles 51 and 52
_		Article 53
_		Article 54
Article 20		Article 55
	Article 1	_
	Article 2	_
	Article 3	_
	Article 4	_
	Article 5	_

	Annex I	Annex I
	Annex II	_
Annex I		Annex II
Annex II		Annex III
Annex III		Article 28
Annex IV		Article 22
_		Annex IV
_		Annex V
_		Annex VI

(1) It is optional for the manufacturer to assign a number to the declaration of conformity.