

EUROFIAS COI

Sports Manual



Rules for the implementation of Sports events

"ARTE World Championship of Fireworks" & "Festival - Fire, Colour & Fantasy"

[English]

4rd edition/2019

This sports manual includes all regulations for the implementation of the two EUROFIAS COI sporting events, "ARTE World Championship of pyrotechnical specialists" and the International "Fireworks Festival - Fire, Colour & Fantasy". The respective local organizers of the event must comply with the Sports Manual, and the rules and regulations contained in the implementation and conduct of the contests must be heeded.

The respective nominated and participating national teams are exclusively subject to the regulations during the competitions and the regulations of this sports manual are mandatory and must be observed.

Amendments to the implementation of rules shall be published as Annex with the identifier [C] the respective year [2015] and consecutive no. [1] as an example: "C-2015-1". They automatically replace the respective current changes and the preceding provisions of the Sports Manual. All changes within the individual regulations will be automatically announced to the respective organizers before start of the competition. A new edition of the sports manual is issued with every change. Starting with the **1st edition/2015**

EUROFIAS COI Chairman
Jörg-Udo Pfeifer, Eisenach, 10.9.2019

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1. Pyrotechnics

1.1 Approved pyrotechnics

All approved pyrotechnical articles are subject to a corresponding testing/QA-certification by BAM [Federal Institute for Materials Research and Testing]- or a similar approved certification body. All approved pyrotechnical articles must be accompanied by a data sheet of the manufacturers/importers [if required], from which various technically tested test parameters such as the caliber, the climbing height, the NEM [net explosive mass] and the approval number of the respective product can be gathered.

Pyrotechnic articles/caliber:

Ball shells: 65mm / 2.5"
 75mm / 3"
 100mm / 4"
 125mm / 5"
 150mm / 6"

Cylinder Shells: 65mm / 2.5"
 75mm / 3"
 100mm / 4"

Roman lights: up to 48mm / 1.8" **Annex C [C-2015-1]**

Batteries: 18mm / 0.70"
 19mm / 0.74"
 20mm / 0.78"
 22mm / 0.86"
 23mm / 0.90"

Batteries:	24mm / 0.94"	
	25mm / 0.98"	
	28mm / 1.10"	
	30mm / 1.18"	
	32mm / 1.25"	
	45mm / 1.77"	
	47mm / 1.85"	
	49mm / 1.92"	
	50mm / 1.96"	
	55mm / 2.16"	Annex C [C-2015-2]
	60mm / 2.36"	Annex C [C-2015-3]
	75mm / 2.95"	Annex C [C-2015-7]
Composite cake:	category 2	Annex C [C-2015-8].
Single shot:	30mm / 1.18"	Annex C [C-2015-4]
	50mm / 1.96"	Annex C [C-2015-5]
	60mm / 2.36"	
	75mm / 2.75"	
Volcanoes:	up to max. 100 seconds burning time	
Lighting articles:	up to max. 100 seconds burning time	
Rockets*:	Zink Art.No.901-930	Annex C [C-2015-6]

* Note recommendation

The supplier for all pyrotechnical materials will be exclusively appointed by the EUROFIAS COI Chairman.

1. Pyrotechnics

1.2 Non-approved pyrotechnics

Missiles: other than those in [1.1] **Annex C [C-2015-6]**

Not permitted are any kind of pyrotechnics which do not have a corresponding testing/QA certification by BAM [Federal Institute for Materials Research and Testing]- or a similar approved certification body. Furthermore, any kind of pyrotechnics which do not comply with the provisions regarding type, caliber and burning time in point [1.1] - the approved pyrotechnics - are not permitted. **The so-called "stapling" of any kind of pyrotechnics by means of metal clips to Mortars, racks or the like for the purpose of fixing pyro materials is forbidden!** To every participant for safety **reasons!** For this purpose only cable ties with correspondingly strong dimensioning may be used.

2. Firing technique / ignition technique

2.1 Approved firing technique

As launching systems for spherical and cylindrical bombs only mortars made of the material "epoxy resin" in a combination with mortar racks made of the material "wood" are allowed. The following dimensions are specified and must be heeded:

Mortar	height	Diameter [I]	Diameter [A]	Weight
65mm / 2,5"	40,2cm	6,4cm	7,0cm	0,55kg
75mm / 3"	45,0cm	7,8cm	8,3cm	0,70kg
100mm / 4"	55,0cm	10,0cm	10,6cm	1,30kg
125mm / 5"	80,5cm	12,8cm	13,5cm	2,10kg
150mm / 6"	90,0cm	15,3cm	16,5cm	3,40kg

Racks	Height	Width	Length	Weight*
65mm / 2,5"	43,0cm	12,0cm	41,0cm	4,80kg
75mm / 3"	50,0cm	13,0cm	49,0cm	7,80kg
100mm / 4"	60,0cm	16,0cm	64,0cm	13,30kg
125mm / 5"	86,0cm	18,0cm	79,0cm	26,40kg
150mm / 6"	96,0cm	21,0cm	76,0cm	33,30kg

Assembly instructions:

65mm / 2,5"	- Rack - is equipped with 5 mortars
75mm / 3"	- Rack - is equipped with 5 mortars
100mm / 4"	- Rack - is equipped with 5 mortars
125mm / 5"	- Rack - is equipped with 5 mortars
150mm / 6"	- Rack - is equipped with 4 mortars

*Weight of the racks when fully loaded with mortars

For safety reasons, the racks should be nailed **exclusively** with wooden slats. For the shooting of "Roman lights" and "Single-Shoots" **only** fan-shaped racks of wood(1), steel(2) or aluminum(3), which ensure a safe standing are allowed. The fastening of the pyrotechnic article on the respective compartment racks(2)+(3) must be with cable ties of appropriate strength so that that a secure hold is guaranteed in any case.

2. Firing technique / ignition technique

2.2. Unauthorized firing technique

Use of a firing technique other than that permitted in [2.1] of designated launch equipment/materials is not permitted. In particular, it is **prohibited** to make mortars and racks of aluminum* or steel** available to the teams and participants of the competition or to allow the teams and participants to use such equipment. Mortars which have a reinforced "bead" at the exit opening are also not permitted for use.

*/** does not apply to racks for shooting Roman lights/fire pots/one shoots!

2. Firing technology/ignition technology

2.3. Ignition technology

As ignition technology only the systems made by the manufacturers listed below, which are in compliance with the regulations and laws of the EU for operation, are allowed. For all other ignition systems, their use by the teams/participants is only permitted if the respective team can prove to the local host/organizer that the ignition system intended for use does not violate the respective country specific law and the associated regulations for the operation of such a wireless ignition system. It must be guaranteed, that all requirements regarding the use of frequencies in the respective country of the local organizer/promoter and in particular the permissible radiated power of the radio transmitter will **not** be exceeded by the teams or participants.

Approved ignition systems:

1st	PYROTRONIX - Germany	
2nd	EXPLO - Austria	
3rd	PYRODIGIT - Italy	
4th	FIRE ONE - USA	
5th	COBRA - USA	Annex C [C-2013-9]
6th	FIRESTORM - UK/Germany	Annex C [C-2015-10]
7th	GALAXIS - Germany	Annex C [C-2015-11]
8th	FIRETEK - Romania	Annex C [C-2019-12]

3. qualification/participation/selection

3.1. Festival - Fire, Colour & Fantasy

All respective national teams may consist of a maximum of three participants. For the participation of a national team in the "Festival - Fire, Colour & Fantasy" it is required that at least one member of the team be in possession of a valid pyrotechnician's license.

This licensed team member shall be the "responsible pyrotechnician" of the respective national team. The remaining team members may, if they do not have their own license, only act under the supervision of the respective person in charge and holder of the license. The selection of a team to take part in the "Festival - Fire, Colour & Fantasy" is made by the respective local organizer of the festival.

3. Qualification/Participation/Selection

3.2. ARTE World Championship of pyrotechnical specialist

Requirements for participation in the "ARTE World Championship of Pyrotechnician's" is the proof of the respective team, that at least one of the team members has previously participated in any international fireworks festival and that the jury awarded that member a place among the top 5 of that competition. This regulation can be waived if the team concerned can provide proof that at least one of its team members has already been nominated once for the government/state leadership of his country of origin took action at state ceremonies by setting off fireworks and/or can provide proof of having organized the opening and/or closing fireworks display for any sports championship of his country of origin with a status of World Championship, European Championship or National Championship of any sport. Furthermore, this regulation can be waived if a team member has already set off fireworks at an international firework display in another country than the respective home country for an internationally renowned fireworks producer as a commissioned fireworks expert. For the participation of a national team in the "ARTE World Championship of Fire workers", it is a further requirement that at least one team member be in possession of a valid pyrotechnic license.

This licensed team member will be the "responsible pyrotechnician's" of the respective national team. The remaining team members may, if they do not have their own license, only perform their activities under the supervision of the licensed team member. The selection of a team to participate in the "ARTE World Championship of Fire workers" is made by the EUROFIAS COI Chairman together with the respective local host/organizer of the "ARTE World Championship of Pyrotechnician's".

4. Protocol

4.1. Opening event

The opening event is to be held as a closed event exclusively with invited guests according to protocol. The following **27 persons** are deemed to be invited guests:

- 1. Country teams each max. 3 persons = 9 persons**
- 2. EUROFIAS COI = 3 persons**
- 3. Local organizer/promoter = 2 persons**
- 4. Jury members = 5 persons**
- 5. Mayor = 1 person**
- 6. Representatives of the 3 main sponsors = 3 persons**
- 7. Official photographer = 1 person**
- 8. Interpreter = 1 person**
- 9. Press representatives = 2 persons**

The way in which the opening event is carried out is at the discretion of the local organizer/promoter. However, the official part [including opening speeches] is to be limited to a **maximum of 15 minutes**. Afterwards a relaxed atmosphere is to be guaranteed, so that the invited guests can get to know each other.

The local organizer/promoter must provide an appropriate cold and warm buffet for the invited guests. The beginning of the opening event is fixed at **19.00 hrs**. The end of the opening event is fixed at **23.00 hrs**.

4. Protocol

4.2. Closing event

A closing event is **not** planned. The competition is considered to be successfully concluded after the presentation ceremony by the local organizer/EUROFIAS COI Sport Director. Opening and closing ceremony may be swapped.

5. Implementation rules

5.1 Competition preparation

The timing of the competition preparation is described in the respective Treaty Protocol No. [3] to the relevant Treaty. Irrespective of the time frame, the local organizer/promoter must ensure that one day before start of the competition - the arrival day of the teams - at the venue of the event/location, all preparations which are directly related to pyrotechnics will be completed. The intended firing place must already be secured and the following technical working and safety equipment shall be located on it:

1. Material sea container ready equipped with all pyrotechnics/launching equipment planned for the competition.
2. Three 7,5t trucks, fixed closed version **without tarpaulin!** with electric tail lift [one truck per team]
3. Two approved hand-held fire extinguishers
4. Plastic chairs for 12 people
5. 220 volt electrical distributor with at least 2 outputs

5. Implementing rules

5.2 Competition procedure

The time schedule of the competition is specified in the respective Treaty Protocol No. [3] of the relevant Treaty. The local organizer / event organizer must make sure that a licensed person of the team, who is in possession of a corresponding permit in accordance with the Explosives Act [§] is **to be considered the person qualified to handle all pyrotechnical materials of Category 4 - and will be responsible for all the handling/work with pyrotechnics, and shall be present at the firing location.** The EUROFIAS COI Sport-Observer shall monitor all work of the teams at the firing ground during the whole time of the competition randomly.

6. Jury

6.1 Admitted jury members

All jury members without exception will be nominated by the respective local organizer/promoter. The following sequence is predetermined:

- 1st jury member = Lord Mayor [town/place of event]**
- 2nd jury member = main sponsor [company]**
- 3rd jury member = member of the local organizer/promoter.**

Jury members 4 and 5 will be nominated and staffed by the respective local organizer with personalities from business, culture and medicine.

6. Jury

6.2 Jury members not admitted

Without exception, the following persons are named as non-admitted jury members:

1. The local organizer/promoter and his staff
2. The EUROFIAS COI Chairman
3. The EUROFIAS COI Sports Director
4. The EUROFIAS COI Sports Observer
5. The EUROFIAS COI Jury Observer
6. Representatives/employees of the pyrotechnics material supplier
7. Any person who works or is active in the fireworks industry

This arrangement ensures a completely neutral, independent evaluation of the teams.

6. Jury

6.3 Work of the jury

Before taking up their work, all jury members shall be briefed by the EUROFIAS COI Jury-Observer and the local interpreter of their task. The EUROFIAS COI Jury observer will hand out the personal evaluation documents to the members of the jury. During the competition the jury members **will not be allowed** to talk to each other about the fireworks/teams and their performances and therefore all jury members **will not be allowed** to exchange influencing opinions. Immediately after the respective fireworks show has been shot by the respective participating teams, the jury members have to enter their evaluations **individually, not together** into the provided evaluation sheets and seal the envelope.

The sealed evaluation documents must then be returned to the EUROFIAS COI Jury-Observer. All jury- members **are not allowed** to be in contact with **each other** during the competition for expressing opinions about third parties or their own evaluations of the participating teams. Only after the third and thus last evaluation documents on the last day of the competition have been submitted to the EUROFIAS COI Jury-Observer - **thus after the completion of the entire competition** - may the jury members exchange opinions among themselves on the subject. With the handing over of the trophies to the participants the confidentiality rule ends for all jury members.

6. Jury

6.4 Evaluation

The appraisal of the evaluation documents of all 9 jury members is carried out by the EUROFIAS COI Sports Director in conjunction with a cross-checking of the EUROFIAS COI Jury-Observer. After successful appraisal the EUROFIAS COI Sports- Director will inform the local organizer/promoter of the achieved final result with. The respective evaluation documents shall be handed over to the EUROFIAS COI Chairman for permanent retention. The award ceremony will take place immediately after the evaluation

6. Jury

6.5 Award ceremony

The award ceremony will take place immediately after the EUROFIAS COI Sports Director + Jury-Observer has carried out the evaluation and has announced the evaluation result to the respective local organizer.

The award ceremony must take place on an event stage in the immediate vicinity of the event location. The award ceremony will be conducted by the respective local organizer/promoter as follows:

1. Brief address by the respective local organizer/promoter.
2. Presentation of the **EUFIAS COI trophies** by the EUROFIAS COI Chairman in the order:

3rd place
2nd place
1st place

and handing over of a trophy to the representative of the local City administration for the implementation in the respective city/town respective country.

3. Presentation of the **winner's cups** and a country-specific souvenir gift by the respective local organizers/promoters in the order:

3rd place
2nd place
1st place

as well as the presentation of a trophy and a country-specific souvenir gift to the EUROFIAS COI Chairman for the realization of the event in the respective city/country. Subsequently the competition will be considered officially closed.

7. Compliance with time limits/rating penalties "music fireworks"

If the time is kept by the respective team with a +/- 0 to 10 seconds [zero time] additional points will be awarded to the teams refer - to the table -. With a +/- which exceeds this time span [zero time], penalty points - see table - will be charged to the respective teams:

[Zero time +/- 0 to 10 seconds/s] = **plus** 30 points

[+/- 10 to 20 seconds/s] = **minus** 10 points

[+/- 20 to 30 seconds/s] = **minus** 20 points

[+/- 31 seconds/s] = **minus** 31+1 point for each additional second

The EUROFIAS COI Sport-Observers monitor the corresponding compliance with the time limit.

8. Advertising / sponsors

The respective local organizer/promoter is completely free to decide how to advertise the competition, as well as to bind and search for local advertising and sponsoring partners. The sponsors are permitted to use text, images and sound to advertise the event and thereby become a sponsoring partner to present their products and services and to carry out appropriate self-advertising. However the sponsors are not allowed to influence in any way the course of the competition, the members of the jury or want to influence the result of the competition in any way.

Attachments

1

C-2015-1

The maximum permissible caliber for all types of:

Roman Candles

Has hereby been increased to:

48mm/ 1.8"

Signed, EUROFIAS COI Chairman
1.1.2015

Attachments

2

C-2015-2

The maximum permissible caliber for all types of:

Batteries

Has hereby been increased to:

55mm/ 2.16"

increased.

Signed, EUROFIAS COI Chairman
2.1.2015

Attachments

3

C-2015-3

The maximum permissible caliber for all types of:

Batteries

has hereby been increased to:

60mm/ 2.36"

Signed, EUROFIAS COI Chairman
3.1.2015

Attachments

4

C-2015-4

As a further permissible caliber for all types of:

Single shots

is hereby:

30mm/ 1.18"

are permitted.

Signed, EUROFIAS COI Chairman
4.1.2015

Attachments

5

C-2015-5

As a further permissible caliber for all types of:

Single Shots

is hereby permitted:

50mm/ 1.96"

Signed, EUROFIAS COI Chairman

5.1.2015

Attachments

6

C-2015-6

From 1 January 2015, only the following are permitted:

Missiles

of the manufacturer

ZINK - Part No. 901 -930

are approved for use.

Recommendation:

For safety reasons, the recommendation is issued, to the use of all types of missiles on a voluntary basis to do without.

Signed, EUROFIAS COI Chairman

6.1.2015

Attachments

7

C-2015-7

The maximum permissible caliber for all types of:

Batteries

has hereby been increased to:

75mm/ 2.95"

Signed, EUROFIAS COI Chairman

7.1.2015

Attachments

8

C-2015-8

As another permissible type of:

Batteries

is hereby:

Certified category 2 composite fireworks

Permitted.

Signed, EUROFIAS COI Chairman
8.1.2015

Attachments

9

C-2015-9

As another permissible type of:

Ignition systems

will hereby be this:

COBRA / USA

Permitted.

Signed, EUROFIAS COI Chairman
9.1.2015

Attachments

10

C-2015-10

As another permissible type of:

Ignition systems

will hereby become this:

FIRESTORM / UK/Germany

Permitted.

Signed, EUROFIAS COI Chairman
1.6.2015

Attachments

11

C-2015-11

As another permissible type of:

Ignition systems

will hereby become this:

GALAXIS / Germany

Permitted.

Signed, EUROFIAS COI Chairman
1.6.2015

Attachments

12

C-2019-12

As another permissible type of:

Ignition systems

will hereby become this:

FIRETEK / Romania

Permitted.

Signed, EUROFIAS COI Chairman
10.9.2019