

Training Guidelines

Rescue Organisations



As at: ~~10.01.2018~~ 15.02.2019

Index

1. General.....	33
2. Requirements	33
3. Education Levels	33
4. Admission	33
4.1 General admission requirements	33
4.2 Specific admission requirements	44
4.3 Verification of the admission requirements	66
5. Educational Objectives	76
6. Examination.....	76
7. Regular Training Courses	77
Attachment	98
A.1 Chief Medical Officer	98
A.2 Chief Race Doctor	1140
A.3 Extrication Team	1244
A.4 Medical Car Crew.....	1342
A.5 Medical Intervention Car	1645
A.6 RTTLS.....	1746
<u>A.7 Additional qualification "alternative drives"</u>	<u>16</u>

The terms for officials or officials' candidates used in the present text automatically include female and male persons.

In case of dispute, only the German regulation text is binding in respect of the DMSB training guidelines.

1. General

- (1) Pursuant to its Statutes, the Deutscher Motor Sport Bund (DMSB) exercises the sporting authority for motorsport in the Federal Republic of Germany. The requirements, duties and authorities resulting hereof are regulated in the International Sporting Code (ISC) of the Fédération Internationale de l'Automobile (FIA) for automobile sports and in the International Sporting Code of the Federation Internationale de Motocyclisme (FIM) and the FIM Europe for motorcycling.
- (2) § 2 of the DMSB Statutes specifies that the DMSB is responsible for the control of motorsport in accordance with standardized regulations. In exercising its statutory duties, the DMSB is amongst others responsible for the education and training of officials and for the administration of issuing licences in accordance with the licence regulations. The DMSB has delegated the implementation hereof to the DMSB Academy.

2. Requirements

- (1) The comprehensive and significant duties, authorities and responsibilities of officials imply that, as an entry requirement, they have a certain amount of experience in the field of motorsport and that they take regularly part in further training and education.
- (2) Moreover, the ability to work in a team as well as physical and mental resilience are presupposed.

3. Education Levels

The education of officials is based on the following levels:

Medical				
Chief Medical Officer (CMO)	CMO - Candidate	CMO - Grade A		
(Chief) Race Doctor	Race Doctor	Chief Race Doctor - Candidate	Chief Race Doctor - Grade A	
Extrication-Team (Ex-Team)	Ex-Team - Candidate	Ex-Team		
Medical Car Crew	Medical Car Paramedic			
	Medical Car Doctor			
Medical Intervention Car (MIC)	MIC Fire-fighter			
	MIC Paramedic			
	MIC Doctor			
Track Safety				
Safety Marshal	Safety Marshal	Safety Marshal - Section Chief		
Track Safety	Track Safety - Candidate	Track Safety - Marshal	Track Safety - Team leader	Track Safety - Director of Operation

4. Admission

4.1 General admission requirements

The general admission requirements are defined in the Education and Examination Regulations of the DMSB (DMSB-APO).

4.2 Specific admission requirements

- (1) The specific admission requirements for the corresponding role of an official are summarized in the following table. Any exemption hereof for important reason is possible but subject to a case-by-case decision taken by the DMSB Academy with the assistance of the Academy Board.

	Age ¹	Qualifications	Attendances as candidate
Chief Medical Officer Candidate	23	Doctor with certificate of qualification in emergency medical services and/or with the additional certification in emergency medicine or paramedic or emergency medical assistant or emergency medical technician with at least three years of professional experience	-
Chief Medical Officer Grade A	25	Doctor with certificate of qualification in emergency medical services and/or with the additional certification in emergency medicine or paramedic or emergency medical assistant or emergency medical technician with at least three years of professional experience	During the last 24 months before the examination in at least 4 DMSB events and in at least one DMSB Championship event (or comparable event, no slalom) with licence "CMO Candidate"
Race Doctor ²	-	Doctor with certificate of qualification in emergency medical services and/or with the additional certification in emergency medicine and experience in emergency medical services as emergency doctor (independently); form C	-
Chief Race Doctor Candidate	-	Doctor with certificate of qualification in emergency medical services and/or with the additional certification in emergency medicine (certificate of qualification as senior emergency doctor being of advantage) and experience in emergency medical services as emergency doctor (independently); form C	-
Chief Race Doctor Grade A ²	-	Doctor with certificate of qualification in emergency medical services and/or with the additional certification in emergency medicine (certificate of qualification as senior emergency doctor being of advantage) and experience in emergency medical services as emergency doctor (independently); form N; valid RTTLS certificate	During the last 36 months before the examination in at least 5 motorcycle events with championship status, including 2 at IDM events, and/or during the last 5 years in the case of doctors who had exclusively been appointed at MX events, 5 motocross events with championship status as chief race doctor / deputy chief race doctor or as assistant of the chief race doctor with licence "Chief Race Doctor – Candidate"
Extrication Team Candidate	18	Member: Certificate of qualification in the fields of fire-fighting service or rescue technology <hr/> Doctor: Medical specialist for anaesthesia, trauma surgery or orthopaedics and/or acquirement of the status as medical specialist in the year of the licence application and certificate of qualification in emergency medical services and/or with the additional certification in emergency medicine	-

Extrication Team	21	<p>Member: Certificate of qualification in the fields of fire-fighting service or rescue technology</p> <p>Doctor: Medical specialist for anaesthesia, trauma surgery or orthopaedics and/or acquirement of the status as medical specialist in the year of the licence application and certificate of qualification in emergency medical services and/or with the additional certification in emergency medicine</p>	During the last 24 months before the examination in at least 3 DMSB Championship events with the licence “Extrication Team – Candidate” and active involvement in the medical rescue services or in the fire-fighting service of the race tracks or in the public area
Medical Car Paramedic	23	Paramedic or emergency medical technician or equivalent professional education with at least 3 years of experience; valid RTTLS certificate, valid mandatory training for emergency medical services personnel pursuant to the applicable national requirements under the Rescue Services Act	At least 3 years of co-operation in the medical rescue services of an aid/rescue organisation appointed at a race track or in the Medical Centre of a race track. The further active involvement in the rescue services of the race tracks is presupposed.
Medical Car Doctor	-	Medical specialist for anaesthesia, trauma surgery or orthopaedics and/or acquirement of the status as medical specialist in the year of the licence application and certificate of qualification in emergency medical services and/or with the additional certification in emergency medicine and practice as emergency doctor in the public medical service on a first rapid response vehicle (FRV), a mobile intensive care unit (MUCI), an intensive care transport ambulance or in medical air evacuation for at least 3 years; valid RTTLS certificate	
MIC Fire-fighter	21	Certificate of qualification in the fields of technical rescue or rescue medicine	
MIC Paramedic	21	Paramedic or emergency medical technician; valid RTTLS certificate recommended (Note: mandatory from 2022)	Sound experience in rescue or fire-fighting services
MIC Doctor	28	Physician with certificate of qualification in emergency medical services and/or with the additional certification in emergency medicine; valid RTTLS certificate recommended (Note: mandatory from 2022)	
RTTLS	-	Paramedic or emergency medical technician or equivalent professional education and specialised knowledge of the basics of anatomy, physiology and pathophysiology as well as of patient care in general and of multiple trauma treatment in particular	-

¹ The key date regulation is applicable.

² The licence „Race Doctor“ is a requirement for the issue of the licence “FIM Chief Medical Officer”. Officials of other Federations who wish to obtain a licence “Chief Race Doctor Grade A” must provide evidence of a valid licence “FIM Chief Medical Officer” and a valid RTTLS certificate.

(2) For officials on duty at events with vehicles with alternative drive, the following additional qualification which can be achieved within a training organized by the DMSB Academy* is required:

Grade	Function	Conditions
Green (instructed personnel)	DMSB Officials: - Chief Medical Officer Other personnel: - Doctors	
Yellow (electrotechnically instructed personnel for non-electrotechnical work)	DMSB Officials: - Extrication Team - Medical Car Crew Other personnel: - Fire-fighting - Rescue control	
Orange (electrotechnical work in zero-potential condition)	DMSB Officials: - Extrication Team (at least 1 person in each car) - DMSB Staffel or Medical Intervention Car (at least 1 person in each car)	Automotive Service Mechanic, Automotive Electrician and Automotive Mechatronics Technician with education after 1973, Body Construction and Vehicle Manufacturing Mechanic with education after 2002 or equivalent professional qualification, e.g. study of vehicle technology

* External certificates (TÜV, DEKRA, etc.) are accepted if complying with the German Statutory Accident Insurance Association (DGUV) requirements

4.3 Verification of the admission requirements

- (1) The verification of the General Admission Requirements in compliance with the DMSB Education and Examination Regulations (DMSB-APO) and of the Specific Admission Requirements pursuant to the present Training Guidelines shall be administered by the DMSB in cooperation with the chairman of the examination board and the Academy Board. This refers also to the granting of possible waivers, which includes amongst others exemptions from completing the required number of minimum attendances before the admission to the examination, the professional qualifications or the admission of candidates included in the DMSB support programme. The granting of a waiver where the minimum age requirements are not met will only be examined if the application is accompanied by a supporting document issued by the applying club with designation of a supervisor for the young applicant (“accompanying activity as official”) who must moreover be of age. Before reaching the minimum age, he/she can only be appointed as a deputy.
- (2) Together with the registration for examination and/or the application for the issue of a licence, the candidate must provide evidence on the valid admission requirements in accordance with the above table.

He must submit the confirmations of his attendances as a candidate, using form A. These attendances must be supervised and certified by the *most senior official of the corresponding training course* ~~Chairman of the Stewards~~ of the corresponding event. The presence of the candidate throughout the entire event and the assumption of only one single role is a condition for his attendance as a candidate to be accepted. The candidate

shall moreover take part in the preparation of the event. Only one attendance as a candidate per calendar day is accepted.

Evidence on the minimum of three attendances out of the mandatory five attendances as candidate must be provided together with the registration for the examination. The maximum of two attendances may be completed subsequently within a time period of up to one year after passing the examination. The licence will in any such case be issued only after having provided evidence on the required total number of compulsory attendances.

5. Educational Objectives

- (1) The educational objective is to prepare the candidate for his role as an official and/or the official for his subsequent duties as DMSB official and to provide him with the necessary sporting know-how, with the knowledge in the coherence of matters in the sporting regulations as well as with the skills and the necessary empathy to interact with other officials as well as with active and passive motorsport people.
- (2) The official must have a general and expert knowledge of the provisions / laws / regulations specified in the appendices.

6. Examination

- (1) Within the education of a candidate, it is recommended that the body which is responsible for the examination appoints an experienced official as mentor who should feel responsible for the preparation of the candidate to the examination. The candidate period should be at least 12 months and no more than 24 months.
- (2) The examination shall be conducted by the DMSB in compliance with the DMSB-APO. In cases where an examination is not required, the DMSB-APO applies accordingly.
- (3) A written examination is not required for Medical Car Crews and MIC crew members. There will be a final examination in which the ability to practically implement the knowledge acquired must be demonstrated.

As, pursuant to the provisions in the Appendix H (SC), Extrication Teams may only work as complete teams, a team certification is mandatory. This certification can be obtained for national and international events.

7. Regular Training Courses

- (1) Pursuant to the licence regulations, all DMSB officials' licence-holders are obliged to attend regular training courses in the discipline concerned at least every third year after the examination and/or the last participation in a training course. This is a requirement for the renewal of the licence.
- (2) The purpose of the regular training courses is to enhance the training content. The training courses shall furthermore inform of important updates and modifications in the sporting laws and the regulations and promote the exchange of experiences.

A successful participation in a national or international certification course for Extrication Teams is accepted as a training course. The licence holder must hereby be specifically listed on the certificate as team member.

The participation in an FIA, FIM or FIM Europe seminar does normally not release from the obligation to attend a training course of the DMSB.

- (3) Any training course shall comprise at least 9 tutorial modules of 45 minutes each in order to be accepted for the renewal of the licence.

ATTACHMENT

A.1 Chief Medical Officer

The tasks of a Chief Medical Officer (CMO) are defined in the provisions of the Appendix H to the ISC. As a member of the event organisation, the CMO is placed under the responsibility of the Clerk of the Course and cooperates closely with him and with the Chief Safety Officer.

Objectives:

- Structure, legal status and authorities of the FIA and of the DMSB
- DMSB provisions regarding insurance, licence requirements, approvals under sports law
- Safety prescriptions in automobile sports
 - DMSB track licence
 - FIA ISC with Appendix H, Appendix L, Appendix O
 - CIK safety issues (CIK / FIA Karting Yearbook)
 - Organisation of mobile track safety
- Cooperation with organisers and other officials and marshals
- Particular issues in the medical rescue services at circuit races, at hill climbs and at rallies
- Status and area of responsibility of the CMO as the person in charge of the medical organisation and running of an automobile sport event
- Staff:
 - Nomination of a responsible doctor for the event
 - Staff assignment on duty in the Medical Centre
- Rescue means:
 - Number and personnel of the ambulances
 - Number and type of the helicopters
 - Control of operation of the ambulances rescue means in application of the Chief Safety Officer's or the Clerk of the Course's requirements
- Medical logistics:
 - Preparation of the medical logistics under consideration of the conditions made by the approving authorities
 - Check of the equipment in the Medical Centre, of the ambulances and of the helicopters, if applicable
 - Organisation of the communication within the medical rescue chain
 - Selection and information of the hospitals before the beginning of the event
 - Inspection of the emergency routes at the circuit and the evacuation routes to the hospitals.

Contents of the education:

Organisation of motorsports
(Organisation and structure of FIA and DMSB)

60 minutes

The doping control	60 minutes
The CMO at circuit races, hill climbs, rally, karting, dragster races, autocross, rallycross	60 minutes
Duties and responsibilities of the CMO in the context of the ISC, Appendix L	30 minutes
Circuit licence and track checklist	30 minutes
Mobile track safety	45 minutes
Status and responsibility of the CMO as the person in charge of the medical organisation within the running of an automobile sport event	60 minutes
<ul style="list-style-type: none"> - Personnel - Vehicles - Medical logistics 	
Personnel and vehicles	60 minutes
<ul style="list-style-type: none"> - Clerk of the Course / Chief Safety Officer / Stewards / Doctors - Communication systems / Race Control - Medical Intervention Cars - Medical Helicopter - Extrication Team - Medical Centre and personnel in the Medical Centre - Doctors and paramedics “on foot” and their identification - Transport of casualties - Medical services for spectators 	
Preparations of the CMO at an automobile sport event	30 minutes
<ul style="list-style-type: none"> - Requirements for doctors, paramedics, vehicles and material - Information of the hospitals and of the emergency service coordination centre - Operation exercises and training - Briefing 	
Deployment of the rescue services	60 minutes
<ul style="list-style-type: none"> - in Race/Rally Control - on the track 	
Documentation	45 minutes
Preparation of a provisional contingency plan	30 minutes
<ul style="list-style-type: none"> - for multiple casualties - Law on Rescue Services of the German Federal States - cooperation with the public rescue services 	
Operational procedures of the mobile medical care at an automobile sport event (film / video)	60 minutes
Particularities for FIA-F1 / GT 1 and WTCC events	30 minutes
Extrication	120 minutes
Entrance test	30 minutes
Education module	780 minutes
Realistic scenario, if provided (uniforms required)	60 minutes

Examination**60 minutes****TOTAL****870+60 minutes****Contents of the regular training courses:**

Core contents:

- Involvement of the CMO and of the doctors at doping controls
- Duties of the CMO at an accident, chain of decisions and power of decisions
- Involvement of the CMO at extrication exercises
- Interaction with team members of casualties
- Activities of the CMO at/after major incidents
- Chain of actions to be taken in case of an accident (procedures on the track, procedures in Race Control)
- Interaction between all the members involved in the organisation
- New standards in emergency medical aid
- Law on Rescue Services of the German Federal states
- Interaction with the doctors at a motor sport event
- Interaction with the Event Directors and Clerks of the Course and the doctors in a major emergency case
- Technical innovations in competition cars and regarding drivers' equipment
- Modifications of the regulations and of the safety prescriptions relevant for the work of the CMO
- Information on special medical technical issues if required for specific motor sport events

Case studies

A.2 Chief Race Doctor

As a member of the event organisation, the Chief Race Doctor is placed under the responsibility of the Clerk of the Course and cooperates closely with him and with the Chief Safety Officer.

Contents of the education:

DMSB Statutes 15 minutes

DMSB German Motorcycle Code 15 minutes

Guidelines 30 minutes

- Accident reporting at competitions, practice sessions and training courses
- Guidelines for Stewards
- Guidelines for Clerks of the Course
- Guidelines for the Chief Safety Officers at road races and SuperMoto competitions
- Guidelines for Track Homologation and Track Safety at road races and SuperMoto competitions
- Guidelines for Cross events in stadiums and halls (Supercross)

Regulations 45 minutes

- Licence Regulations

- Regulations on the safety services in motorcycling (BRM)
- General Regulations for road racing
- Sporting Regulations for SuperMoto, Regulations for Motocross

Contents of the regular training courses:

Implementation of the chapter “Mobile Medical Care” in the track licence	15 minutes
Preparation of the mobile medical provisions at an event	30 minutes
Preparation of the accident report forms and accident statistics in motorcycling (available on the DMSB homepage)	15 minutes
Assessment of the motorsport fitness of a casualty under consideration of the exclusions (form B), available on the DMSB homepage	30 minutes
Doping in motorsport	30 minutes
Sporting Regulations for the International German Motorcycling Championships (IDM+ ADAC MX-Masters)	30 minutes
News within the FIM and the BRM	15 minutes
Medical Car	15 minutes
Exchange of experiences from the events of the last 3 years, Offroad and road racing	45 minutes
Entrance test (candidates only)	30 minutes
Education module (candidates only)	105 minutes
Regular training course module (all)	225 minutes
Examination (candidates only)	30 minutes
TOTAL	390 minutes

A.3 Extrication Team

The duties of the Extrication Teams are defined in the provisions of the Appendix H to the ISC. Their task is to extricate from his vehicle any driver who has been involved in an accident and is unable to get out of the cockpit without outside help. Extrication teams are placed under the responsibility of the chief medical officer.

Module „Extrication“:

Organisation in automobile sport:

- Structure, legal position and authorities of the FIA and of the DMSB
- DMSB regulations on insurances, licence requirements and approvals under sporting law
- DMSB track permit
- ISC including the Appendix H
- Co-operation with organisers and other officials
- Control of operation of the ambulances rescue means according to the instructions of the Chief Safety Officer or the Clerk of the Course

Extrication operation:

- Target/philosophy of the extrication
- Team structure

-
- Communication within the team and as a team
 - Self-protection
 - Equipment of the extrication teams, modifications
 - Accident mechanisms
 - Pattern of injuries
 - Types of extrication
 - Extrication procedure for open and closed vehicles
 - [Extrication procedure for cars with HALO](#)
 - Vehicle specifications

Practical exercises

- Realistic accident mechanisms
- Vehicle types as model variants

Entrance test	20 minutes
Module „Extrication“	600 minutes
Realistic scenario, if provided (uniforms required)	60 minutes
Examination	60 minutes
TOTAL	680+60 minutes

A.4 Medical Car Crew

The duties of the Medical Intervention Vehicle crews are defined in the provisions of the Appendix H to the ISC. One of these medical intervention vehicles shall amongst others follow the field in the first lap of a race. Within the scope of licences of the DMSB, this car is called Medical Car. The Medical Car crew is under the control of the Chief Medical Officer or the Chief Race Doctor.

Targets:

- Structure, legal position and authorities of the FIA and of the DMSB
- DMSB regulations on insurances, licence requirements and approvals under sporting law
- Safety provisions in automobile sports:
 - DMSB track permit
 - FIA ISC including Appendices H, L, O
 - Structure of mobile track safety
- Interaction with organisers and other officials
- DMSB Guidelines for the deployment of the Medical Car
- Status and responsibility of the CMO as the person in charge of the medical organisation within the running of an automobile sport event
- Particularities in the organisation of the medical rescue services (at circuit races)
- Rescue means:
 - Number of ambulances and personnel
 - Number and type of the helicopters

- Control of operation of the ambulances rescue means according to the instructions of the Chief Safety Officer or the Clerk of the Course
- Medical provisions:
 - Preparation of the medical provisions under consideration of the conditions made by the approving authorities
 - Equipment in the Medical Centre, of the ambulances and of the helicopters, if applicable
 - Organisation of the communication within the medical rescue chain
 - Inspection of the emergency routes at the circuit and the evacuation routes to the hospitals.

Module „Medical Car Theory“

Organisation of motorsport (Organisation and structure of FIA and DMSB)

The CMO at circuit races

Mobile track safety

Status and responsibility of the CMO as the person in charge of the medical organisation within the running of an automobile sport event

- Personnel
- Vehicles
- Medical provisions

Status of the Medical Car crew with regard to the Chief Medical Officer

Personnel and vehicles

- Clerk of the Course / Chief Safety Officer / Stewards / Doctors
- Communication systems / Race Control
- Medical Intervention Cars
- Medical Helicopter
- Extrication Team
- Medical Centre and staff in the Medical Centre
- Doctors and paramedics “on foot” and their identification
- Transport of casualties
- Medical services for the public

Deployment of the rescue services

- in Race/Rally Control
- on the track

Documentation

Contingency Plan

- for multiple casualties
- Law on Rescue Services of the German Federal States
- cooperation with the public rescue services

Operational procedures of the mobile medical care at an automobile sport event (film / video)

Particularities for FIA-F1 / GT 1 and WTCC events

For Medical Car Doctor moreover: Interaction with Event Directors, Clerks of the Course and the doctors in a case of an emergency as part of a possible Section Management Health (ALG) of the corresponding administrative district

Module „Medical Car Practical Experience“ (mandatory only for paramedics)

The driving course is a one-day training particularly designed for the demands on Medical Car Paramedics which must be organised by a DMSB licenced “chief instructor”. The educational objective is the safe control of the DMSB Medical Car, in particular when driving off the racing line.

Module „Extrication“

Equipment in the FIA Bag

Working on a formula car

Working on a GT car

Working on cars with HALO

Emergency Extrication

Module „Medical Car Theory“	300 minutes
Module „Medical Car Practical Experience“ (mandatory only for paramedics)	210 minutes
Module „Extrication“	120 minutes
Realistic scenario, if provided (uniforms required)	60 minutes
TOTAL	630+60 minutes

Contents of the regular training courses:

Core areas:

- Interaction of all the organisations involved
- New standards in emergency medical aid
- Technical innovations in competition cars and regarding drivers' equipment
- Modifications of the regulations and safety prescriptions relevant for the work of the Medical Car Paramedic
- Law on Rescue Services of the German Federal States
- Interaction with the doctors at a motor sport event
- Interaction with the Event Directors, Clerks of the Course and doctors in a major emergency case as part of a possible Section Management Health (ALG) of the corresponding administrative district
- Information on special medical technical issues if required for specific motorsport events

Case studies

A.5 Medical Intervention Car

The duties of the Medical Intervention Vehicle crews are defined in the provisions of the Appendix H to the ISC.

One medical intervention car shall transport the medical rescue equipment and the equipment for a technical intervention as well as for fire-fighting to the site of the accident and start immediately with the rescue operation.

Within the scope of licences of the DMSB, this car is called "Medical Intervention Car". The Medical Intervention Car crew is placed under the responsibility of the Chief Medical Officer.

Module „Medical Intervention Car“

„German Mixed Type“ used at rallies and off-road events as well as at non-permanent tracks as for example hill-climb races

Module "MIC Theory"

Organisation of motorsport (structure and composition of the FIA and the DMSB): 60 minutes

- DMSB Rally Regulations
- DMSB Rallycross Regulations
- DMSB Autocross Regulations
- DMSB Hill-climb Regulations

Procedures for a MIC operation: 150 minutes

- Target and deployment characteristics MIC intervention
- Team structure
- Internal / external communication
- Self-protection
- Equipment of the MIC / modifications
- Mechanisms of accidents
- Pattern of injuries
- Rescue types and Extrication
- Particularities of fire-protection in motorsport
- Update on the subject of technical rescue
- Vehicle specification of the competition cars
- Race Ressource Management (RRM)

Module "MIC Practice"

Practical exercise 240 minutes

- 3 extrication modes:
"crash rescue, urgent prompt rescue, gentle rescue"
- Position within the team according to accident scenario
- Handling of the equipment and/or assist in other special fields, application of the principle "Allround is all"
- Hitching and towing a car with the MIC vehicle
- Interaction with third parties

Module "MIC Theory"	210 minutes
Module "MIC Practice"	240 minutes
Realistic Scenario, if provided (uniforms required)	60 minutes
Examination	90 minutes
TOTAL	540+60 minutes

Contents of the training courses:

Core areas:

- Relevant changes in the regulations
- Innovations in emergency medicine
- Technical innovations of motorsport vehicles
- Innovations of the equipment and standard equipment
- Case studies regarding rescue operations during the last seasons

Practical exercises

A.6 RTTLS

Race Track Trauma Life Support (RTTLS) is a concept for the structured and priority orientated medical care for seriously injured patients in motor sport.

Module „RTTLS“

Basics in the emergency medicine at motorsport events	60 minutes
RTTLS algorithm	90 minutes
- Theoretic background	
- Practical implementation	
Guidelines etc. regarding diagnostics and treatment of patients	30 minutes
Case-by-case decisions	45 minutes
- Reflected application of algorithms and guidelines	
Workshops and training in scenarios	300 minutes
- Extrication in motorsport and extrication demonstration	
- Realistic mechanisms of accidents	
Self-study (RTTLS Book)	180 minutes
Entrance test	45 minutes
Module „RTTLS“	525 minutes
Realistic scenarios, if provided (uniforms required)	60 minutes
Examination	45 minutes
TOTAL	795 + 60 minutes

A.7 Additional Qualification “alternative drives”

Content of the instructions – HV grade green

Max. 90 minutes

- *On-site instruction at the event*
- *Position of the warning lights and of the emergency stop on the corresponding vehicles*
- *Use of the protective equipment*
- *Identification of HV components*

TOTAL

Max. 90 minutes

Content of the instructions – HV grade yellow

90-180 minutes

- *Position of the warning lights and of the emergency stop on the corresponding vehicles*
- *Use of the protective equipment*
- *Instructions on the performance of the work without HV*
- *Identification and definition of HV components*
- *Basis knowledge in first aid procedures in case of electrical accidents*
- *Overview alternative drives*
- *Rough overview on operating principles*
- *Electrical dangers*
- *Safety*
- *Protective equipment*
- *Conduct after an accident*
- *Identification of the vehicles*
- *Identification of the operating status of the HV systems*

Written part of the examination

30 minutes

Oral part of the examination (if necessary)

10 minutes

TOTAL

130-220 minutes

Content of the instructions – HV grade orange:

Theory:

360 minutes

- *Position of the warning lights and of the emergency stop on the corresponding vehicles*
- *Use of the protective equipment*
- *Identification and definition of HV components*
- *Basis knowledge in first aid procedures in case of electrical accidents*
- *Overview alternative drives*
- *Rough overview on operating principles*

- *Electrical dangers*
- *Safety*
- *Protective equipment/ Means of rescue/ fire extinguishers*
- *Conduct after an accident*
- *Identification of the vehicles*
- *Identification of the operating status of the HV systems*
- *Authority to issue directives*
- *Training methods*
- *Issue of certifications*

Practical applications

180-360 minutes

- *Enabling of vehicles*
- *Advanced protective measures*
- *Release of enabled vehicles*
- *Evaluation of safety concepts*
- *Vehicle inspections*
- *Vehicle checks of undamaged and accident-damaged vehicles*

Written part of the examination

90 minutes

Oral part of the examination (if necessary)

10 minutes

TOTAL

280-460 minutes