



Motorcycle Police Training and Service Vehicle Development in Hungary

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Abstract

As a result, effective implementation of the service's mission system will depend on the training development that can change simultaneously with technical development and deliver systemic results in implementing missions. This article examines how police personnel authorised to drive specialised motorcycles use their vehicles and their main functions and analyses seasonal mileage of motorcycle usage. A questionnaire survey of motorcycle police officers enrolled in the Basic Motorcycle Training and License Renewal Training Programme of the Police Education and Training Centre in 2022 provided the data. According to aggregated data, the average annual mileage of the country's total of 218 service vehicles is 3,599 km. The main patrol category, with 104 people (officer, patrol leader, patrol commander, team commander), is significantly better with 6589 km/year mileage, while the 114-strong secondary patrol category (event scene and investigation, district officer, patrol commander, driver) has 2266 km mileage on average in 2022. The results of the survey highlight the low average mileage of motorcycle police. The main reason for this is that for more than 50 percent of trained officers, performing duties on a service motorcycle is only a secondary task. However, the training system for police motorcycle usage must be restructured.

Keywords

motorcycle traffic, questionnaire survey, occupancy study, average mileage, and distinctive signs.

1. Introduction

Motorcycle patrols have been prominent in traffic policing in the past century. The performance of professional tasks in public areas requires that the tasks using service motorcycles be carried out professionally by police personnel trained for this purpose (*Christie, 2020*). In order to achieve this, a flexible, innovative and system-oriented basic training and a further training system must be put in place. Therefore, the Police Education and Training Centre is key in building and managing the training system. This task is particularly difficult, similar to the relationship between schools and the labour market. The question is who to train and how to train them so that they can carry out their tasks as effectively as possible in the future. In order to give precise answers to these questions, it is necessary to explore the problems that arise during the training and to propose solutions. This research aims to reveal what the members of the Hungarian police force who are entitled to drive service motorcycles with distinctive markings do, i.e. what their "main task" is and approximately how many kilometres they drive in a year. The primary purpose of this research is to analyse police motorcycle training. This illustrates the high professional standards expected of motorcycle police officers.

2. Background

Training police officers on motorcycles is important for several reasons, as motorcycles play a unique and crucial role in law enforcement. Here are some key reasons why such training is emphasised:

Manoeuvrability: Motorcycles are more manoeuvrable than traditional police vehicles, allowing officers to navigate traffic more efficiently. This agility is particularly valuable in urban environments, where congestion is common.

Accessibility: Motorcycles can access areas that larger vehicles cannot, making them essential for patrolling parks, pedestrian zones, and other locations where cars cannot easily go. This enhances the police presence and response capability in diverse settings.

Quick Response: Motorcycles can respond quickly to emergencies and incidents, reducing response times. This rapid response is critical when immediate action is necessary, such as accidents, crimes in progress, or other emergencies.



Cost-Efficiency: Motorcycles are generally more fuel-efficient and have lower maintenance costs than larger patrol vehicles. This can result in cost savings for law enforcement agencies, allowing them to allocate resources more effectively.

Specialised Roles: Some police departments use motorcycles for specialised roles, such as traffic enforcement, escort duty, and event management. Specialised training ensures that officers can perform these roles safely and effectively.

Skill Development: Riding a motorcycle requires specific skills, and training helps officers develop the expertise needed to operate the vehicle safely in various conditions. This includes training in defensive riding techniques and emergency manoeuvres.

Enhanced Pursuit Capabilities: While pursuits should always be conducted safely and within established guidelines, motorcycle officers can more effectively pursue suspects through congested or narrow areas where larger vehicles might struggle.

Adaptability: Motorcycle training equips officers to adapt to different road conditions and environments. This adaptability is crucial in diverse policing scenarios.

In summary, motorcycle training for police officers enhances their capabilities, responsiveness, and engagement with the community. It allows law enforcement agencies to deploy officers effectively in various situations, ultimately contributing to public safety.

2.1. Training conditions

Article 4 of the Instruction of Ministry of Interior 18/2016 (VIII.16.) defines the categories of motorcycle training and the entitlements:

(d) Basic motorcycle training: 120 hours of training in preparation for driving a service vehicle using a distinctive sign with a category A licence;

(e) 'renewal training for the licence for basic motorcycle training means compulsory periodic training of 20 hours of refresher training, repeated annually from the date of completion of the basic motorcycle training, to renew the qualification obtained based on the training referred to in (d);

Upon completing the initial and periodic training specified in points (d) to (e), a driver may ride a service motorcycle with a distinctive sign.

§ 7 (1) Conditions for participation in training and further training for drivers of motor vehicles for internal affairs authorities by category of motorcycle:

(d) basic motorcycle training:

(da) valid category A driving licence;

(db) successful completion of advanced driver training or advanced driver renewal training;

(dd) a valid Group 2 medical certificate;

(de) a valid driving psychology test (PAV I or equivalent as defined by the training body);

(df) passing a motorcycle pre-selection test; and

(dg) planning for a position involving the driving of a motorcycle;

(e) renewal training for the licence for basic training for motorcyclists:

(ea) a valid category A licence;

(eb) successful completion of basic motorcycle training;

(ec) at least six months of accident-free driving experience, without any fault on the motorcycle driver's part, immediately prior to the start of the renewal training in basic motorcycle training;

ed) a valid Group 2 medical certificate; and

(ee) a valid driving psychology test (PAV I or equivalent as defined by the training body).



The conditions of participation in such training show that, in the case of an application for motorcycle training, the applicant is already a person with significant previous training and driving experience. After completing advanced driver training or license renewal training, he/she has acquired the right to use distinctive signs in road traffic with a service vehicle (Buda, 2022). Driving a motorcycle and the training as well is a cognitive load, meanwhile the training ensure long term sustainability of motorcycle police in Hungary.

Motorcycle training is the most complex level of training from a technical point of view, which places a considerable demand on police officers in terms of theoretical and practical implementation. The execution of tasks in a two-wheeled vehicle is highly dangerous during the performance of official duties, and it is therefore vital that motorcycle training achieves its objectives in the light of the official duties to be performed in the future and that the participants in the training meet the conditions of competence for the outcome.

2.2. Basic motorcycle training

The primary aim of the basic motorcycle training is to train police officers employed by central, regional and local police forces, who are scheduled to drive service motorcycles, to perform their duties using distinctive signs. Furthermore, persons performing motorcycle duties in other bodies under the Ministry of Interior are also trained. The training program provides drivers of service motorcycles with the theoretical and practical knowledge required to handle and drive service motorcycles at a high standard and fully perform general and specific service tasks using motorcycles. Using a police motorcycle is an extreme cognitive load therefore training the usage of these vehicles and persons are essential.

Having completed the training program, the trainees must be able to react promptly and professionally in traffic with rapid situational awareness (Goodwin *et al.*, 2022), drive and operate the service motorcycle safely, carry out a motorcyclist's service tasks and complete the driving test course under time stress within the specified level time (complex professional report):

Table 1. Curricular units and curricular elements of the professional programme

Unit	Topic	Theory [lesson]	Practical [lesson]	Total [lesson]
1	Basic knowledge of training	4	–	4
2	Transport psychology	2	–	2
3	Healthcare, first aid	2	–	2
4	Vehicle physics, motorcycle controls	2	2	4
5	Vehicle stopping, vehicle tracking	4	4	8
6	Driving exercises on the training track	6	56	62
7	Professional practice with the police motorcycle subdivision	4	12	16
8	Driving practice on public roads	1	7	8
9	High-speed cornering techniques on closed race track	1	7	8
10	Practical report	–	2	2
11	Complex professional report (theory, practice)	2	2	4
Total		28	92	120

* Source: Instruction of Ministry of Interior 18/2016 (VIII.16.) Training programme 120 hours of basic motorcycle training for service motorcycle drivers.



2.3. Basic motorcycle training renewal training

This program offers theoretical and practical training for drivers of service motorcycles employed by bodies under the control of the Ministry of Interior. It provides drivers of service motorcycles with the theoretical and practical knowledge they have acquired to handle the vehicle with high proficiency and use it professionally. The training participants should be able to react promptly and professionally in traffic while assessing the situation quickly, driving and operating motorcycles safely, and carrying out their duties safely.

Table 2. Curriculum details

Curriculum element	Content	Theory [lesson]	Practical [lesson]	Total [lesson]
1. Theoretical training	<ul style="list-style-type: none"> Knowledge of the law (Highway Code, use of distinctive signs) Driving theory (motor vehicle physics) 	2	–	2
2. Practical training	<ul style="list-style-type: none"> Complex tasks based on driving exercises on a training track at low speed 	-	8	8
3. Practical training	<ul style="list-style-type: none"> Driving exercises on a training track at high speed (driving on an ideal curve) 	-	8	8
4. Driving under time stress	<ul style="list-style-type: none"> Completion of a set of exercises from a series of practised driving tasks within a limited time 	–	2	2
Total		2	18	20

* Source: Instruction of Ministry of Interior 18/2016 (VIII.16.) Mandatory annual 20-hour basic motorcycle training for service motorcycle drivers, licence renewal training programme

The successful completion of the training will provide a professional basis which will be further developed in the practical performance of the duties of the service, individually and in groups. The ever-changing and evolving road traffic environment, including the increasing number of powerful vehicles, encourages the police to keep pace with these technical developments. To this end, the fleet of service vehicles, including service motorcycles, has significantly developed recently. Between 2017 and 2021, 70 high-performance BMW 1200 and 1250 RTP motorcycles were delivered to police forces in Hungary, and the National Accident Prevention Committee (OBB) plans to purchase and deliver 50 more vehicles by 2023. It can be seen that there is a will for technical improvement and that the OBB is providing substantial financial resources for this.

At the same time, questions arise about whether the staff training is up to the new technical challenges and how effectively the trained motorcycle officers are driving the service motorcycle. Consideration should be given to the primary (those whose direct task is to provide service motorcycle support) and secondary (those whose non-primary task is to provide service motorcycle support) responsibilities associated with the post determining the motorcycle service's composition.

3. Methodology and results

I conducted a questionnaire survey as a motorcycle instructor at the Police Education and Training Centre, with the research period running from the first motorcycle licence renewal training this year, 13 April 2022, to the last, 22 August 2022. The main purpose of the questionnaire was to accurately assess a trained police motorcyclist's effectiveness in performing his/her duties. To do this, it is necessary to know the current national staffing situation, the trained personnel's primary duty assignments, and the service motorcycle's mileage. In the light of this data, we can draw appropriate conclusions for evaluating effectiveness. The survey lasted six months and involved 218 people who completed the questionnaire on paper.

Before presenting the results of the questionnaires, it is important to define what it means to be a motorcycle police officer today (2023) in Hungary. This depends on the department the policeman serves, his position, and his skills (Sakashita *et al.*, 2014). During training, the examination system is uniform, but the performance of the duties varies considerably. This depends on the professional experience and skills of the motorcycle officer concerned.



Table 3. Results of the questionnaire

Group I 104 people	Mileage [km/year]	Group II 93 people	Mileage [km/year]	Group III 21 people	Mileage [km/year]	Total 218 people	Mileage [km/year]
patrol	7314	accident scene investigator	1230				
patrol leader	7621	district officer	2026				
patrol commander	7923	service control		4030			
team leader	3500						
Average	6589	Average	2428	Average	1789	Average	3599
Average for those riding less than 5000 km/year (42 people)	120	Average for those riding less than 5000 km/year (75 people)	62	Average for those riding less than 5000 km/year (11 people)	740	Average for those riding less than 5000 km/year (128 people)	307

Source: own compilation

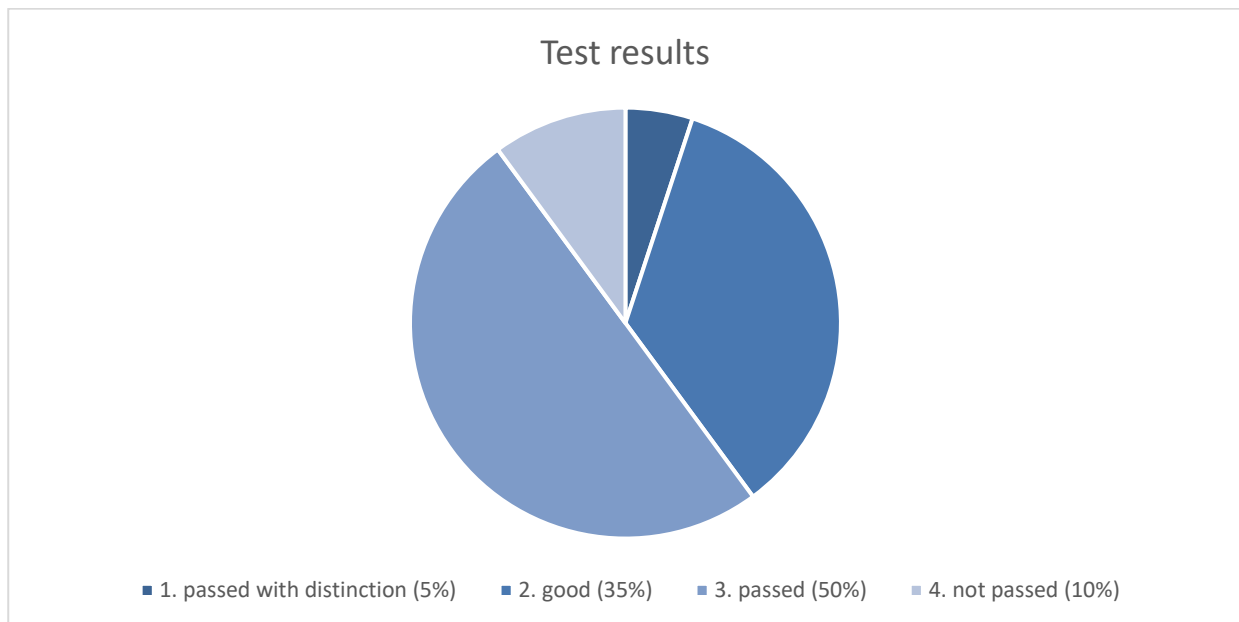


Figure 1. Driving test results

Source: own compilation

4. Analysis & discussion

Based on the evaluation of the questionnaires and the average mileage data, it can be concluded that the average use of service motorcycles by trained police personnel (218 persons) is low (3,599 km/year), of which the average use of service motorcycles by those under 5,000 km/year (128 persons) is critically low (307 km/year). Although the number of service motorcycles (265) is adequate for the number of police officers, and these vehicles are constantly being upgraded and replaced by the OBB, the lack of training and the drastic drop in the level of training cause significant problems in the practical implementation of tasks due to the low mileage.

More than 50 % of the 218 police personnel entitled to drive a service motorcycle with a distinctive sign have an average mileage of 307 km/year, which is extremely low. Based on my professional experience, at least 5000–10,000 km of annual service motorcycle driving is required to maintain the routine and develop the driver's skills. A good basis for comparison would be the mileage rate of civilian motorcyclists in Hungary. This is put at 6000 kilometres by several civilian trade journals, but this is more likely to be based on the service interval of motorcycles. Authoritative sources such as the Central Statistical Office (KSH) or the Public Roads Nonprofit Ltd. database do not include the mileage of motorcycles, only the number of units or cross-sectional passages.



Driving a service motorcycle requires highly professional experience, so the training is based on the basics. The training programme will not achieve its purpose if the required professional experience cannot be achieved. I therefore propose a compulsory minimum of 5,000 km/year of service motorcycle driving, which can be completed in a specific format, in the home area, regionally or in a group. It is also necessary to consider the regional services' workload in other directions, but the level of qualification can only be maintained and improved if regular driving practice is implemented.

5. Conclusion

For training police officers who can use the distinctive marking on their motorcycles, 20 hours of closed course training per year can be considered a low number of hours (Table 2). With the amendment of the Ministry of Interior instruction in 2021, the 80 hours of basic motorcycle training was converted into 120 hours by including professional practice in the increased number of hours that could lead to more sustainable training.

This made it possible for the personnel involved in the practical training to perform joint service with the Motorcycle Subdivision of the Budapest Police Headquarters in the inner area of Budapest and its surrounding area. The results of the basic training are encouraging, with the police officers who participated in the new type of training completing the complex professional report with significantly greater efficiency and greater tolerance on cognitive load.

Following this improvement practice, I propose to increase the length of the motorcycle licence renewal training from two days (20 hours) to three days (30 hours). The increased number of hours (10 lessons) would also create joint professional practice opportunities.

The research results highlight that the average mileage of a police officer on a motorcycle is low. The aim is to ensure that the performance of the duties of the service, in particular police escorting and traffic policing (vehicle enforcement) tasks, are carried out at a high standard. In order to achieve this, the current closed-course training system needs to be adapted to include at least 10 hours of practical training in addition to the basic tasks set out in the training programme. This would also mean extending the training without placing an undue burden on regional and central bodies. The implementation of practical training in public places could also have a reinforcing effect on the police.

Another important factor is the significant technical improvements made in recent years. Police officers must update their technical knowledge to operate the 120 high-performance service motorcycles acquired by the police between 2017 and 2023. In other words, technical development implies the need for training development.

The development of further training in the renewal of motorcycle licences and the introduction of hours of practical training in public areas is justified. Raising the level of qualification is a prerequisite for increasing the driving experience of motorcyclists, and I therefore consider it necessary to set a minimum mileage. The professional programme aims to ensure a high level of service.

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