REPUBLIC OF ALBANIA
MUNICIPALITY OF FIER

Technical Report on the Study for the Installation of Traffic Light Signalling Systems (Traffic Lights) at the Main Road Intersections of the Road Infrastructure in the City of Fier

The Working Group established by Order No. 478/1 of the Mayor of the Municipality, dated 22.04.2025, with the subject:

"Study and preparation of the documentation regarding vertical road signs, horizontal road markings, illuminated traffic signals, traffic signs and additional equipment for the main roads within the ring road of the City of Fier,"

has, among its objectives, to identify and present the need for the installation of **traffic signalling systems (traffic lights)** at the most problematic intersections in the City of Fier.

For this purpose, the Working Group monitored the most problematic road intersections in the City of Fier and concluded that the intersections where the installation of traffic lights is urgently required are the following:

The project will be implemented at **six (6) main intersections** within the Municipality of Fier:

- **Intersection 1 – Bocov**
- **Intersection 2 – Hotel Leone**
- **Intersection 3 – Social Insurance**
- **Intersection 4 – Railway Station**
- **Intersection 5 – Zogu i Zi**
- **Intersection 6 – Tax Office**

1. Project Objective

The primary objective of the project is to improve road safety, ensure efficient urban traffic management, reduce accidents and conflicts at intersections, and significantly decrease accidents resulting in injuries, loss of human life, and damage to citizens' vehicles.

The current condition of several intersections in the City of Fier is problematic, particularly those serving as the main entry and exit routes to the city centre, due to the continuous increase in traffic volume throughout the city.

Traffic management at these intersections has so far been highly chaotic and presents a high risk of conflicts, as traffic movement is not adequately regulated and the right-of-way is often unclear.

All these intersections have a history of accidents involving both pedestrians and vehicles, resulting in numerous conflicts, many of which have escalated into fatal road accidents and significant property damage.

The above situation is mainly due to the urban layout of these intersections, where buildings are often located very close to the roadway, thereby obstructing visibility at the intersections and consequently contributing to the frequent occurrence of road accidents.

For this reason, the Working Group recommends:

- Installing traffic lights at **at least six (6)** of the main intersections in the City of Fier, which will have a direct impact on:
    - Reducing the number of road accidents;
    - Reducing traffic conflicts;
    - Improving the movement of vehicles and pedestrians during peak hours;
    - Preventing unexpected traffic congestion.
- Providing environmental benefits by reducing frequent and uncontrolled vehicle stops, thereby decreasing exhaust emissions and fuel consumption.

The initial investment cost for the installation of traffic lights is justified by the expected reduction in accidents, both in terms of protecting human life and reducing damage to vehicles, while simultaneously increasing the overall economic efficiency of road traffic.

2. Project Implementation Location

1. Bocov Intersection

Intersection of **"Kastriot Muço" Street** with **"Mujo Ulqinaku" Street** and **"Lami Monka" Street**.

2. Hotel Leone Intersection

Intersection of **"Kastriot Muço" Street** with **"Skënderbeu" Street** and **"Novruz Pashko" Street**.

3. Social Insurance Intersection

Intersection of **"Rauf Nallbani" Street** with **"Jakov Milaj" Street**.

4. Railway Station Intersection

Intersection of **"Rauf Nallbani" Street** with **"Harrilla Bozdo" Street**.

5. Zogu i Zi Intersection

Intersection of **"Brigada XI S" Street** with **"Jakov Milaj" Street** and **"Andon Profka" Street**.

6. Tax Office Intersection

Intersection of **"Brigada XI S" Street** with **"Harrilla Bozdo" Street** and **"Llukan Toska" Street**.

Traffic Flow Assessment Data

No.	Intersection	Main Traffic Direction (vehicles/hour)	Secondary Traffic Direction (vehicles/hour)	Pedestrians/hour	Risk Level
1	Bocov	700	400	150	Medium
2	Hotel Leone	1,000	600	280	High
3	Social Insurance	1,100	700	350	Very High
4	Railway Station	800	450	250	Medium–High
5	Zogu i Zi	1,200	650	300	Very High
6	Tax Office	950	500	200	High

Based on the above data and the current traffic management situation in the city, all intersections will allow movements in the **straight ahead, left turn, and right turn** directions from each approach, **with the exception of the Social Insurance Intersection**, where entry toward the city centre from **"Rauf Nallbani" Street** is prohibited.

Consequently, vehicles travelling along **"Harrilla Bozdo" Street** will be permitted to proceed straight ahead, turn left, or turn right towards the Railway Station, while vehicles exiting the Railway Station will only be permitted to turn **left** or **right** onto **"Harrilla Bozdo" Street**.

3. Technical Analysis by Intersection

1. Zogu i Zi Intersection

- Major urban junction with a very high traffic volume.
- High potential for conflicts between left-turning and right-turning vehicles.
- Heavy pedestrian traffic.

Proposed Solution:

- Coordinated traffic lights synchronized with the main traffic corridor.

- Dedicated signal phases for turning movements.

2. Tax Office Intersection

- Main entrance corridor to the city.
- Heavy traffic congestion during peak hours.

Proposed Solution:

- Fixed-time traffic signal with optimization according to peak traffic periods.

3. Social Insurance Intersection

- Institutional area.
- Intensive pedestrian movement.

Proposed Solution:

- Coordinated traffic lights synchronized with the main traffic corridor.
- Extended pedestrian crossing time.

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4. Railway Station Intersection

- Mixed traffic of vehicles and pedestrians.

Proposed Solution:

- Coordinated traffic lights synchronized with the main traffic corridor.

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5. Bocov Intersection

- Medium-to-high and continuously increasing traffic volume due to the **Memorial Hospital** and the northern entrance to the city.

Proposed Solution:

- Coordinated traffic lights synchronized with the main traffic corridor.

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6. Hotel Leone Intersection

- A highly important connecting intersection with a very heavy traffic flow, mainly due to the **"Skënderbeu" Ring Road**, the road leading to the **Memorial Hospital**, and the northern entrance to the city.

Proposed Solution:

- Coordinated traffic lights synchronized with the main traffic corridor.

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4. Advantages of Traffic Signal Installation

The installation of traffic lights will provide the following benefits:

- Elimination of conflicts at intersections.
- Increased safety for pedestrians.
- Controlled and efficient traffic flow management.
- Possibility of coordinating traffic signals throughout the road network.

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5. Conclusions and Recommendations

- Immediate intervention , as effective traffic management is essential at all six intersections.
- Traffic lights should be coordinated along the city's main road corridors.
- The installation of traffic lights should be accompanied by appropriate road infrastructure, horizontal road markings, and adequate street lighting.

Working Group

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