

ASECAP Road Safety Conference

Road Safety – A shared responsibility

A story of success or failure?



BRUSSELS, EUROPEAN ECONOMIC AND
SOCIAL COMMITTEE

21ST MARCH 2017

09.00-13.00



FOG SYSTEM SAFE DRIVING IN LOW VISIBILITY



Since the very first step of its realization, Brebemi focus has been on implementing high safety standards.

The route of this highway develops inside a climatic zone characterized by fog, with visibility that sometimes reduces even below 50 meters.

The idea has been to create an effective and immediate reference for users in transit across the Highway in days of fog, based on a lighting system.

The two goals of this mission were:

- 1. Ensure the perception of the danger linked to poor visibility;**
- 2. Increase the perception concerning the trend of motorway route.**

FOG SYSTEM SAFE DRIVING IN LOW VISIBILITY



Evaluations and studies related to consumption, electrical power supply and control parameters have allowed to better configure the system.

In this respect, the LED technology has guaranteed low power consumption. The versatility of the installation system has made possible the integration of this device in the structures ensuring maximum comfort to users. The type of controller of power equipment has allowed to integrate the management and supervision of this system within the global management system of the motorway.

FOG SYSTEM

SAFE DRIVING IN LOW VISIBILITY



The Fog System consists of LED lighting devices positioned on the safety barriers which delimits the central reservation.

This LED driven tool is composed of 120 amber LEDs with a total light output of 120 candela.

This system grows to a length of about 48 km along the track towards Milan and along the track towards Brescia. It is divided into 12 functional sections for about 5 km.

The power supply at 400 V alternating current is ensured by means of 12 stations distributed all along the highway.

FOG SYSTEM SAFE DRIVING IN LOW VISIBILITY



Through a series of fog detection sensors, equipped with high efficiency optical vision, the system perceives the visibility distance, it processes it with humidity data collected and activates, if necessary, the device for foggy weather conditions.

This system is placed within the general architecture of the management system of the Motorway control. It leads to the User Service Centre of Brebemi in Romano di Lombardia where the information and data from the field sensors distributed along the highway converge. User Service Centre operators can switch on or off the fog system by interrogating the management system.

FOG SYSTEM SAFE DRIVING IN LOW VISIBILITY



The user support System for foggy weather also provides anti-fog junction delineators, controlled by the fog sensors and supervised by the User Service Centre. The delineators are positioned in correspondence to the acceleration and deceleration lanes of the highway and integrated into the safety barrier.

