



# Innovating and Strategies to Enhance Road Safety

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*Traffic Engineer*

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# Company introduction

- Milano Serravalle – Milano Tangenziali S.p.A., established in 1951, operates at the center of one of the main busy European infrastructural networks in terms of circulating vehicles, which serves the Milan and wider Lombardy socio-economic system.
- Based in Assago, Milano Serravalle - Milano Tangenziali S.p.A., which directly employs about 570 people, is the concessionary of the A7 Motorway from Milano to Serravalle Scrivia and the Milan main ring motorway roads.
- Since 2021, the controlling share package of Milano Serravalle, equal to 100%, is owned by FNM S.p.A., the leading integrated sustainable mobility Group in Lombardy (for instance trains, bus, logistic, etc.).



# At a Glance

187 km di managed road

ADT of:

- A50: ~ 170.000 v/d
- A51: ~ 165.000 v/d
- A52: ~ 90.000 v/d
- A7: ~ 100.000 v/d

~ 3.155.706.205 v/km

~ 10 tollgate

~ 100 road operator

~140.000 hours of service

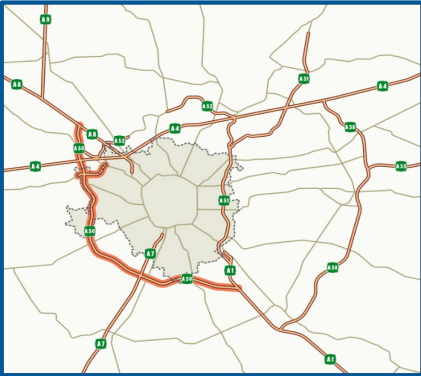
milanoserravalle  
milanotangenziali



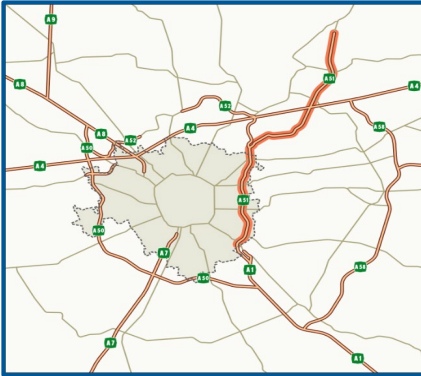
# A7 motorway – from Milano to Serravalle Scrivia (86 km)



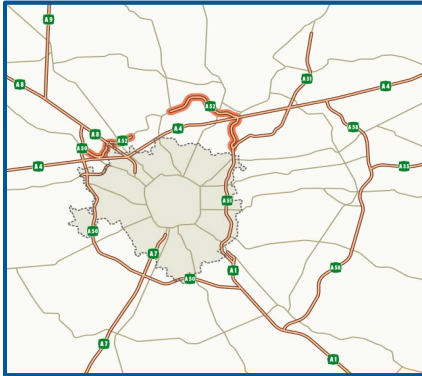
# A50/A51/A52 Motorway – Milano Ring Road



**A50**  
Tangenziale Ovest di Milano  
(36 km)



**A51**  
Tangenziale Est di Milano  
(29 km)

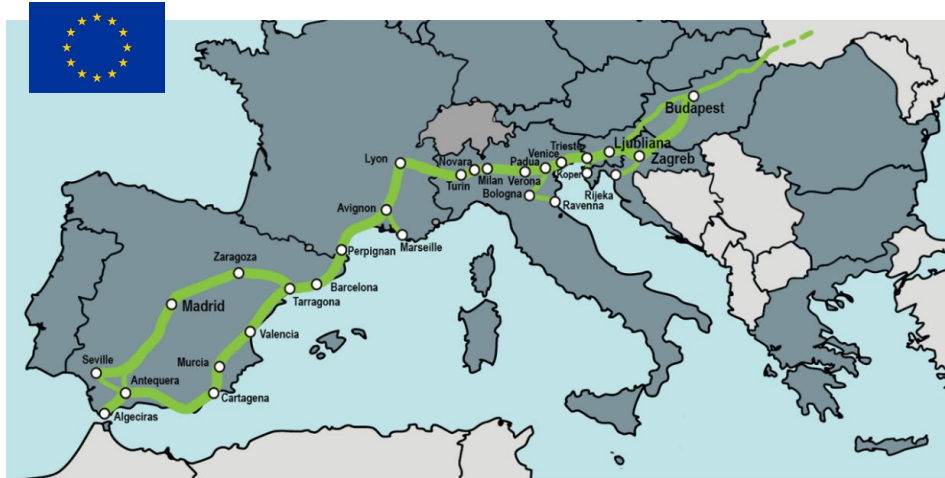


**A52**  
Tangenziale Nord di Milano  
(13 km)

# TEN-T Corridor

The A7 and A50 motorways, and part of A51 are included in TEN-T European corridors:

- the Third “Mediterranean corridor”,
- the Sixth “Rhine-Alps corridor”.

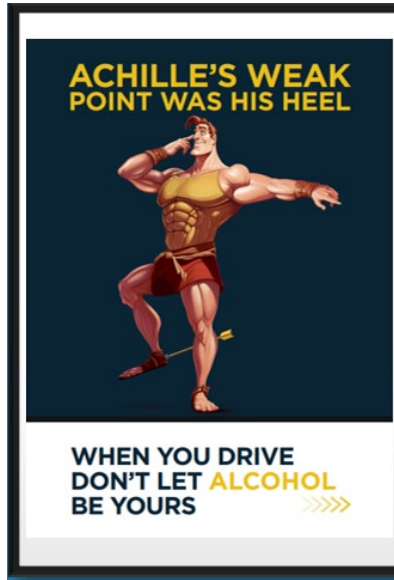


# 3 Pillars

Technologies



Communication Campaign



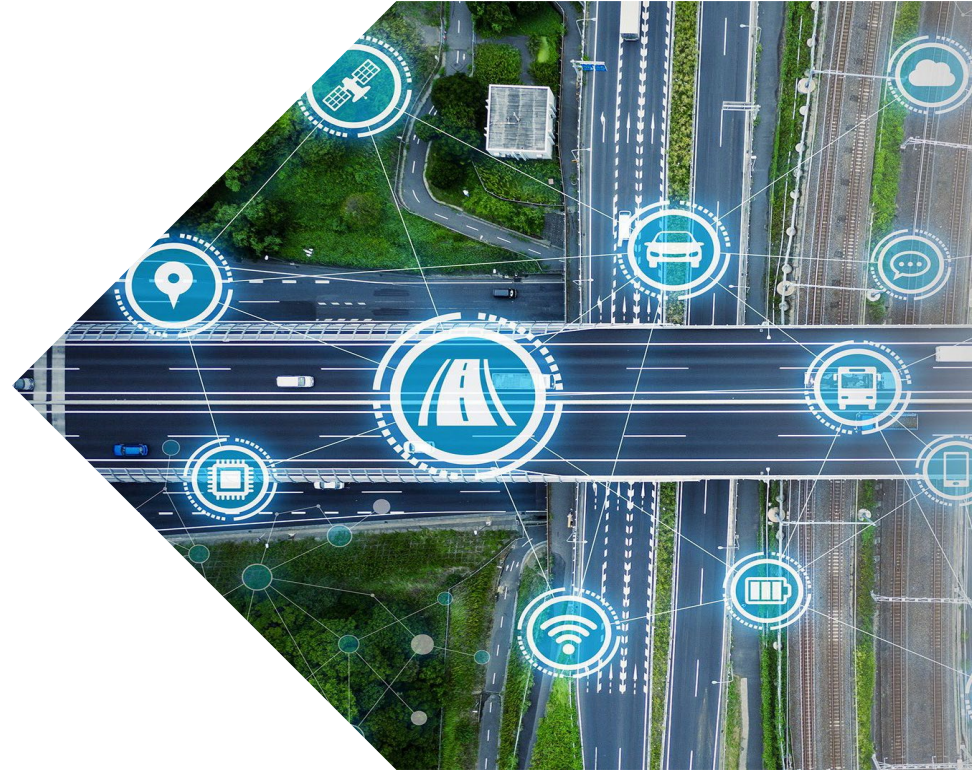
Road Safety Manual

THE ROAD SAFETY MANUAL



# Smart Road and Road Safety

- dynamic environment that enhance road safety
- constantly collecting information about:
  - traffic flow
  - vehicle behavior
  - potential hazards



Provide real-time information to drivers:

- average speed
- speed at detection points
- travel time
- queue lengths
- optimal routes
- **alerts for traffic disruptions**



The AID device detect traffic disruptions



The Traffic Management System create a scenario



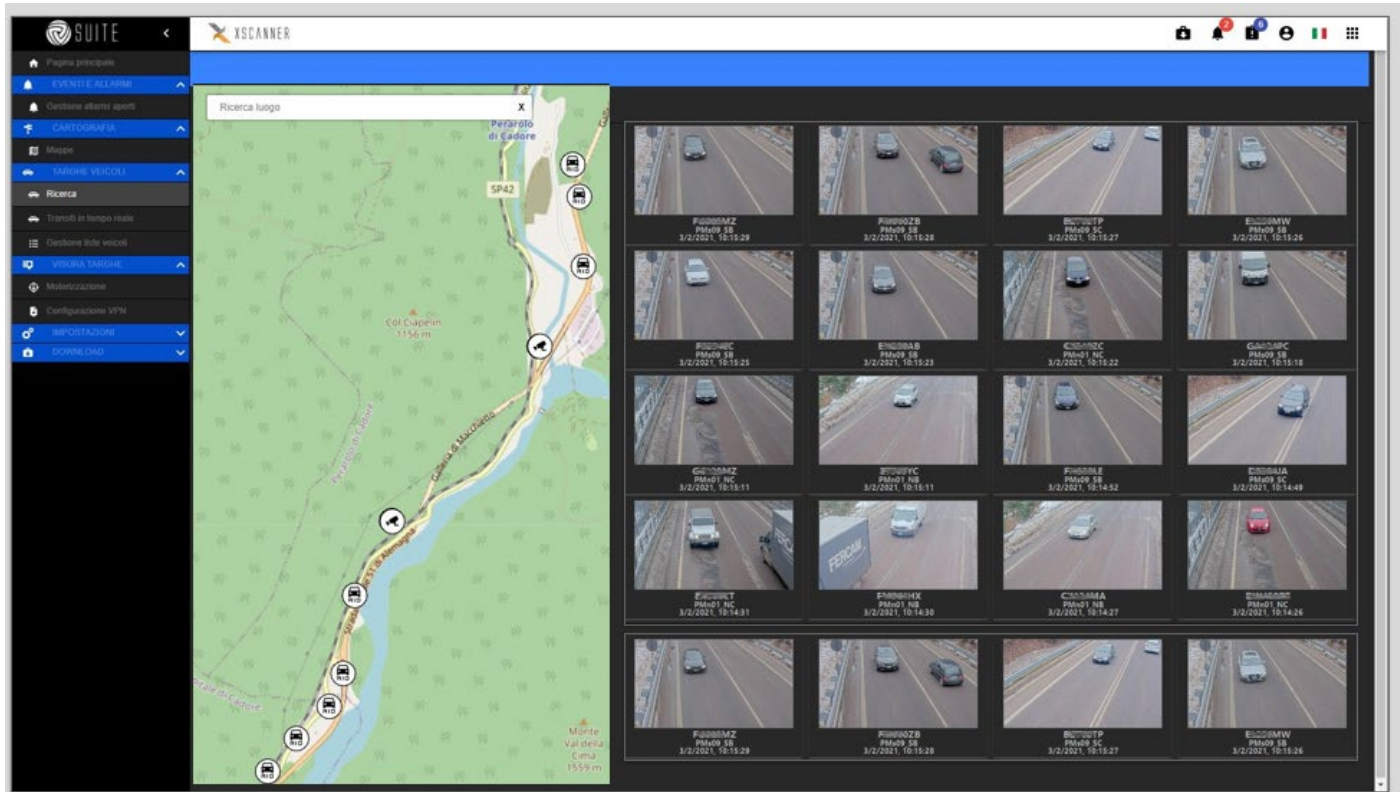
The control center operator validates the alarm



The user are informed by variable message panel or web/app site or OBU



# From traditional and manual Traffic Management...



# ..to Automated Traffic Management

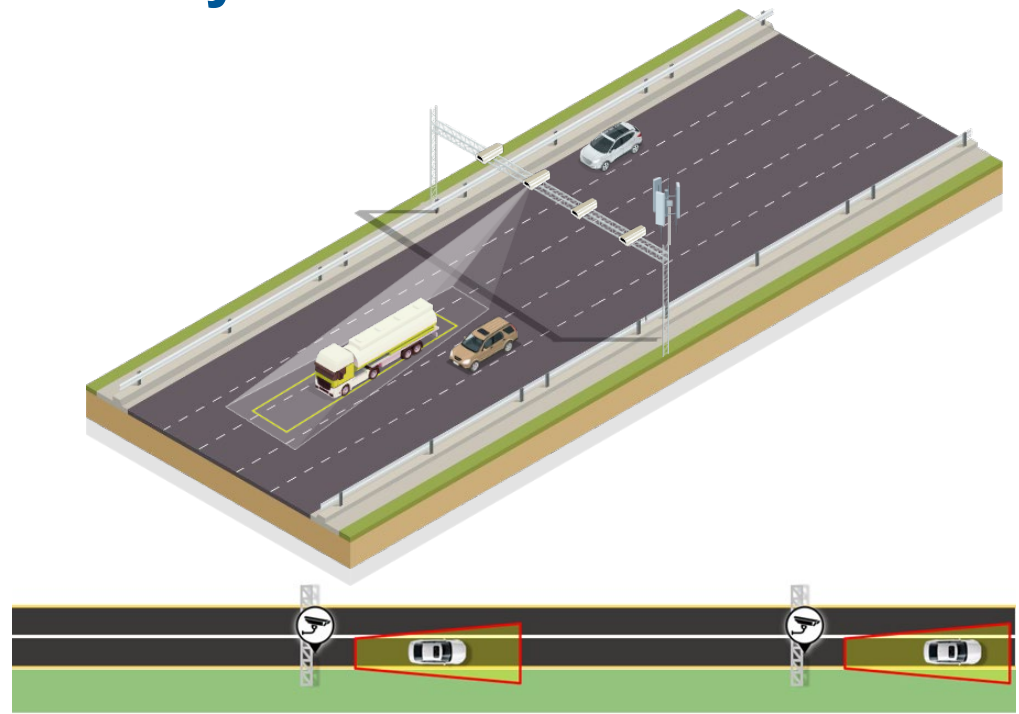
The screenshot displays the ITS (Intelligent Traffic System) interface. At the top left, the ITS logo is visible. The main area is a map of Milan, Italy, with a green route highlighted. The route starts in the north, passes through the city center, and ends in the south. A search bar at the top of the map area contains the text "Search for places". On the right side of the map, there is a "DIRETTE LIVE" (Live Directions) section with four small video feeds showing traffic camera views. The top right corner of the interface features several icons: a shopping bag, a notification bell with a red "21" badge, a person icon with a blue "12" badge, the Italian flag, a grid icon, and the "VIGILATE" logo.

# Intelligent Traffic Management System

- Automatic Incident Detection (AID)
- Automatic Number Plate Recognition

(ANPR) cameras

These tools monitor and analyze traffic conditions in real-time, **allowing for immediate responses to any disruptions.**



# RSU C-V2X & DSRC



Platforms

—  
CCR  
(Centro di Controllo Remoto)

INFO & Management



LA CAMPAGNA  
SULLA SICUREZZA

GUIDA BENE  
NON FARE **L'EROE**

DRIVE SAFE  
DON'T BE

**A HERO**

**ACHILLE'S WEAK  
POINT WAS HIS HEEL**



**WHEN YOU DRIVE  
DON'T LET ALCOHOL  
BE YOURS >>>>**

**CASSANDRA  
PREDICTED THE CATASTROPHIC  
EVENTS OF TROY**



**YOU PREVENT DANGERS  
BY RESPECTING  
THE SPEED LIMIT >>>>**

**THE GODDESS CALYPSO  
HELD ULYSSES FOR 7 YEARS  
ON THE ISLAND OF OGYGIA**



**YOUR MECHANIC  
WILL KEEP YOU  
FOR A LOT LESS TIME  
TO CHECK YOUR CAR >>>>**

**JULIUS CAESAR**  
INSPECTED HIS TROOPS  
BEFORE EVERY BATTLE



**BEFORE STARTING**  
**CHECK THE CONDITION**  
**OF YOUR CAR'S**  
**TYRES AND LIQUIDS**



**JOAN OF ARC**  
WAS CERTAIN TO POSSESS  
DIVINE POWERS



**YOU DON'T HAVE ANY  
ALWAYS FASTEN  
YOUR SEAT BELT >>>>**

**HERCULES**  
ACCOMPLISHED  
TWELVE MYTHOLOGICAL LABOURS



**LET HIM SHOW OFF  
WHEN YOU ARE TIRED  
TAKE A BREAK >>>>**

**CHRISTOPHER COLOMBUS**  
NAVIGATED  
TWO MONTHS  
BEFORE DISCOVERING AMERICA



**YOU CAN TAKE  
TWO EXTRA MINUTES  
TO GET TO  
THE NEXT EXIT >>>>**

**LEONARDO DA VINCI  
DREW THE VITRUVIAN MAN  
BY FOLLOWING PRECISE  
GEOMETRIC FORMS**



**FOLLOW HIS EXAMPLE  
FOLLOW THE  
ROAD SIGNS** >>>>

**NARCISSUS FELL**  
IN THE LAKE BECAUSE HE WAS DISTRACTED  
BY HIS OWN IMAGE



**DON'T BE LIKE HIM**  
**WHEN YOU DRIVE**  
**LOOK AT THE ROAD** >>>>

**ICARUS IGNORED**  
**HIS FATHER'S ADVICE**  
AND FLEW TOO CLOSE TO THE SUN



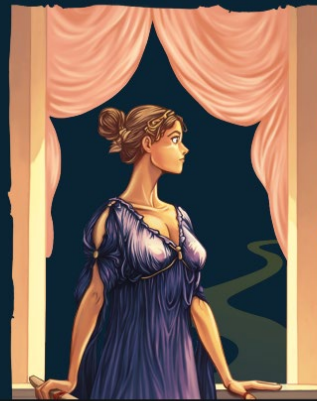
**LISTEN TO OURS**  
**RESPECT SAFETY**  
**DISTANCES** >>>>

**LEONIDAS LOST  
HIS LIFE FIGHTING  
OVER 100.000 PERSIANS**



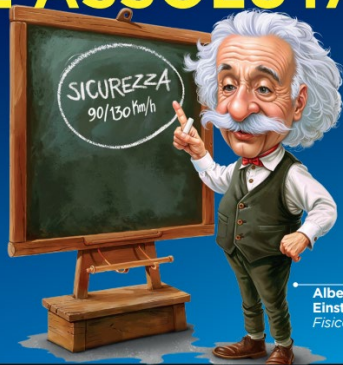
**ALL IT TAKES FOR YOU  
IS ONE DISTRACTION  
WITH YOUR MOBILE PHONE >>>>**

**PENELOPE  
AWAITED THE RETURN  
OF ULYSSES FOR 20 YEARS**



**YOUR LOVED ONES AT HOME  
ARE WAITING FOR YOU,  
BE CAREFUL  
WHEN YOU DRIVE >>>>**

IL TEMPO È RELATIVO  
MA LA SICUREZZA  
È ASSOLUTA



Albert  
Einstein,  
Fisico

RISPETTA SEMPRE  
**I LIMITI**  
DI VELOCITÀ



OGNI LUOGO  
PUÒ ISPIRARTI

Frida Kahlo,  
Pittrice



MA LE PIAZZOLE DI SOSTA  
SONO RISERVATE ALLE EMERGENZE  
**NON USARLE**  
PER FARE PAUSE



milanoserravalle

milanotangenziali

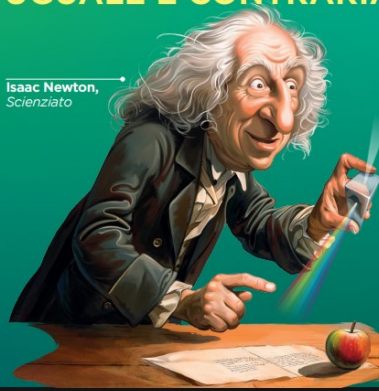
**COMUNICA  
CON L'AUTOSTRADA**  
CHIAMA IL NUMERO VERDE 800.184.786



Guglielmo  
Marconi,  
*Inventore*

**PER INFORMARTI  
SUL VIAGGIO** >>>>

**PER OGNI AZIONE  
C'È UNA REAZIONE  
UGUALE E CONTRARIA**



Isaac Newton,  
*Scienziato*

ANDARE CONTROMANO  
IN AUTOSTRADA  
**PUÒ AVERE  
CONSEGUENZE  
DEVASTANTI** >>>>



**Grazie**