

# Journées francophones de la sécurité routière



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Namur, Belgium

## Vision Zero 2030: the Portuguese road safety strategy for this decade

# Why do we need a road safety strategy?

European Union in **2020**:

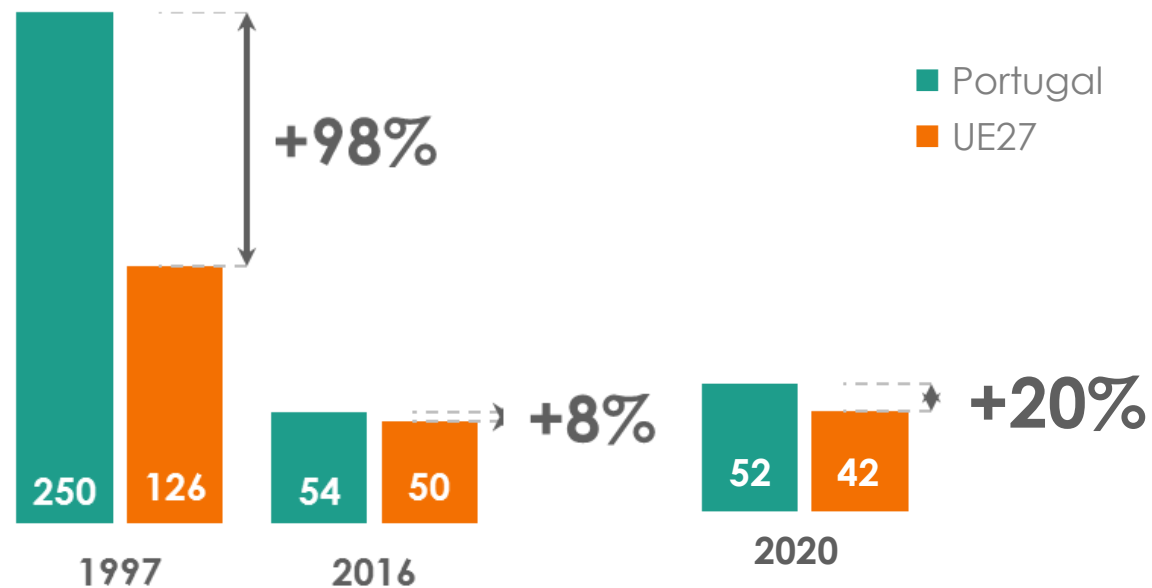

 ≈ **18.800** deaths (2% of world)  
 ≈ **360** deaths per week  
**-36%** compared to **2010**

Eu Target for **2020**: **-50%**  
 of road fatalities compared to  
**2010**



**FAILED**

fatalities per million inhabitants



Portugal:  
**-83%** in the last 25 years  
**-46%** compared to **2010**  
**-33%** compared to **2010**

# Why do we need a road safety strategy?

**2010-2019** average:



**650** fatalities



**2.000** serious injuries



**3%** GDP



# The Portuguese road safety strategy 2030



**Our vision**

A Portugal where no one dies or is seriously injured in the road transportation system



**The ethical principle**

We do not accept any life loss or any serious injured in the road transportation system



**Our target**

Zero is the only acceptable number

## What does it means?



### It means...

- Accepting that **people make mistakes** while using the traffic system
- Accepting that **death is a price too high** to pay for a driving mistake
- Accepting that the road transportation system has to be **designed to avoid road deaths and serious injuries**
- Putting the **life of every human being in the heart** of the road transportation system
- Building a Safe Road Transportation System that is **design for people**

**Making Road Safety a Priority**

# Vision Zero 2030

[www.visaozero2030.pt](http://www.visaozero2030.pt)



Based on the **Safe System approach**

Safe Road System that is:

- **Self-explaining**
- **Forgiving**
- **Inclusive**

Safe roads and streets: the basis for healthy, sustainable and secure mobility

- UN SDG
- Stockholm Declaration
- Second Decade of Action for Road Safety 2021-2030
- EU's targets

Biennial action plans

# Our Targets

## 2030

- **50%** reduction in fatalities recorded in 2019: **313**
- **50%** reduction in serious injuries MAIS3+ recorded in 2019 : **1044**
- Save **2.250 lives**, **7.550 serious injuries** MAIS3+, and **20.000 M€**

## 2050

- **Zero** fatalities and **Zero** serious injuries



# Vision Zero 2030 principles

- The **technical quality** of the strategy and action plans;
- A **high rate of participation** with a wide range of contributions (+500);
- **Involvement of the key players**, the main public and private sector entities as well as civil society;
- The inclusion of **future challenges** and alignment with other public policies;
- **Credibility and feasibility.**

# Vision Zero 2030 methodology



- Apply **Top down approach**
- Set **Final Targets** but also **Intermediate Targets**: Safety Performance Indicators (SPI)-  
Management by objectives
- Use **Data driven** and **Evidence based safety management framework**
- Define **Baseline Scenario and its forecast for 2030** - the “*as is*” scenario
- Define **Baseline year** – follow the EU official position: **2019**
- Separate **institutional level measures** from **operational level measures**
- **Predict the aggregated effect of the interventions on the targets** and compare with the forecast of the baseline scenario – Effect of the Road Safety Plan

# Vision Zero 2030 enabling conditions

- A stronger **governmental and institutional leadership**
- A new level of **commitment and cooperation**
- Build a **culture where safety is a key element** of all decisions
- **Financial and Human** resources
- knowledge transfer program for **disseminating the Safe System principles**
- Create the conditions to a **data-driven and evidence-based RSM**
- Set interim targets: **Safety Performance Indicators (SPIs)**
- Good quality and disaggregated road safety **data** (crashes and exposure)
- **Evaluate and Monitor** results promoting **transparency and accountability**


# Vision Zero 2030

## Main conclusions of the diagnostic

### Type of Road

- 40% National Roads (19% crossing villages)
- 35% Urban Roads
- 9% Motorways
- 9% Other roads
- 7% Trunk roads



### Type of Crash

- 39% Collisions
- 39% SVC 
- 22% Hit pedestrians

### Speed KPI

- Urban Roads: 74%
- Rural Roads: 41%
- Motorways 50%

### Type of Road User

- 45% Car
- 22% PTW 
- 22% Pedestrians 
- 4% Cyclists
- 2% HGV&Buses

### Alcohol

- 20% road fatalities the driver had BAC > legal limit
- 20% pedestrians death fatalities the driver had BAC > legal limit
- KPI - 99,2%

Data Fatalities average 2 010-2019

# Vision Zero 2030

## 13 key areas of interventions

### Safe System Components

Geographical  
area

Safe Roads

Safe Speeds

Safe vehicles

Safe road use

Post-crash  
care

Rural Roads

Car  
occupants  
Motorcyclists  
Speeding

Car  
occupants  
Motorcyclists  
Speeding

Car  
occupants  
Motorcyclists  
Speeding

Car  
occupants  
Motorcyclists  
Speeding

Urban Roads +  
roads through  
villages

Pedestrians  
PTW  
Bicyclists  
Speeding

Pedestrians  
PTW  
Bicyclists  
Speeding

Pedestrians  
PTW  
Bicyclists  
Speeding

Pedestrians  
PTW  
Bicyclists  
Speeding

All

Alcohol  
Drugs  
Distraction  
Fatigue

Alcohol  
Drugs  
Distraction  
Fatigue

# Vision Zero 2030

## Potential effects of an intervention

Reduced version of equation by Siegrist (2010):

$$\text{Actual Potential Intervention} = A \times B \times C$$

**A** – Number of casualties targeted by the intervention

**B** – % of casualties related to the target crash that can be influenced by the intended intervention

**C** – Effectiveness of the intervention measured by the % casualties that will be spared if the intervention is fully applied

It is further proposed to use the method of common residuals to take account interventions targeted at the same group of crashes

# Vision Zero 2030

## Example of one intervention

**Target:** Urban Areas

**Scope of intervention:** Speed Management

**Components of the intervention:**

**Com 1:** 30 km/h zone with infrastructure interventions: “self-explaining” roads/ streets.

**Com 2:** Speeding campaign for protecting VRU

**Method:** Define the length of urban roads (37.527), the % that is elected for the intervention (64%), and the correspondent number of fatalities (272)

**Planning:** Pilot 3 or 5 zones as demonstration projects to asses the impact and then ramping-up country-wide application

**Partcipipants:** ANSR, Municipalities, Community

**Resourses:** 350k/zone

**Estimated efect:** about 44 fatalities/year ( $0,64 \times 272 \times 0,25$ ) in 24.000 km (49 with Com )



zonas



Manual de apoio à implementação de Zonas 30



# Vision Zero 2030

- Can we implement it?
- Can we create the conditions for decreasing the number of road deaths and serious injuries?
- Can we get to zero?
- Can we save lives and even obtain financial and economic gains despite the high investment required?
- Is it possible?
- Can we do it?
- Can we afford it?







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