

# Serious road injuries in the DSS

An abstract geometric pattern in a lighter shade of orange than the background. It consists of several interconnected lines and circles, forming a complex, crystalline structure that resembles a molecular model or a network diagram. The pattern is centered and occupies a significant portion of the lower half of the slide.

# Serious road injuries



- Road safety policy making was mainly aimed at reducing fatalities, but
- Serious road injuries are getting more attention in recent years
- EU target: 50% decrease in serious road injuries between 2020 and 2030



# SafetyCube – Serious road injuries

Serious injury = MAIS3+

- Guidelines for the determination of serious road injuries
- Review of physical and psychological consequences of serious road injuries
- Costs related to serious road injuries
- Main risk factors related to (burden of) serious road injuries
- Information on post-impact care measures



Practical guidelines for the registration and monitoring of serious traffic injuries  
Deliverable 7.1



Physical and psychological consequences of serious road traffic injuries  
Deliverable 7.2



Costs related to serious road injuries  
Deliverable 7.3

# Post impact care measures



# Information on serious road injuries



- Information on serious road injuries
  - *How to determine the number of serious road injuries → leaflet*
  - *Health impacts*
  - *Costs*
- A section within 'knowledge' or 'methodology' or a separate item on the homepage

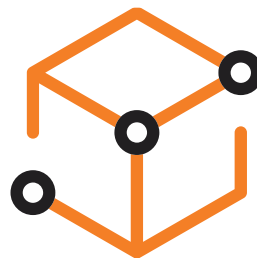
# Risk factors related to serious injuries



- Groups of casualties with relatively many MAIS<sub>3</sub>+ casualties or relatively many YLD:
  - *Cyclists*
  - *0-17 year olds*
  - *Spinal cord injuries*
  - *Femur shaft fractures*
- Risk factors associated with these groups of casualties
- Somehow feed back into DSS

# Prioritisation of measures





**SafetyCube**

## **Prioritisation of measures**

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SafetyCube Decision Support System Launch Event  
Brussels, 5 October 2017



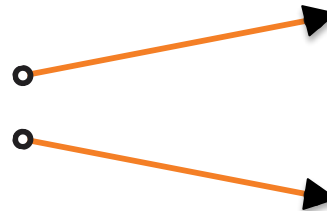
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# SafetyCube DSS



**Road Safety**  
Decision Support System



**Risks**

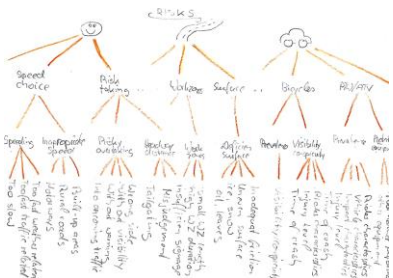
**Measures**

**Taxonomy**

**Repository**

**Synopsis**

**Prioritisation**



# Prioritisation Economic efficiency assessment



## Info on measures

**Effectiveness**  
saved crashes  
- per severity category

**Time horizon**

**Costs of measures**

## *Economic assessment*

### *Cost Effectiveness Analysis*

- *Costs per crash prevented  
(for each severity category  
separately)*

### *Cost Benefit Analysis*

- *Net present value  
(benefits – costs)*
- *Cost benefit ratio  
(benefit / costs)*

## Info per country

**Crash costs**  
- severity category

Discount rate



## Study/studies

Effectiveness (CMF)

Target Group

(Prevented crashes)

(Penetration rate)

(Side effects)



Measure costs

- Studies
- Rune's list
- Other sources

Inflation  
correction

PPP  
correction

## E3 calculator

Input

Calculations

Output

Cost – benefit ratio

Including & excluding  
side-effects

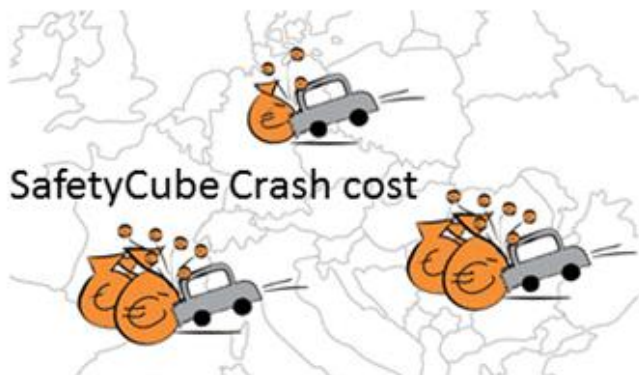
Costs per prevented  
crash

Break even costs

Look-up tables:  
Crash-costs, inflation, PPP

Taxonomy – link to DSS

SafetyCube Crash cost

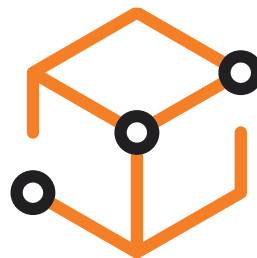


	A	B	C	D	
1	<b>COST-BENEFIT ANALYSIS</b>				
2					
3	<i>Costs (present values)</i>				
4	One-time investment costs	311 070	EUR		
5	Recurrent costs	179 122	EUR		
5	Total costs excluding side-effects	490 192	EUR		
7					
8	Side-effects	-	EUR		
9	Total costs including side-effects	490 192	EUR		
0					
1					
2	<i>Benefits</i>				
3	Prevented Casualties	521739	EUR		
4					
5	<i>Socio-economic return excluding side-effects</i>				
6	Net present value	31 548	EUR		
7	Cost-benefit ratio	1.1			
8					
9	<i>Socio-economic return including side-effects</i>				
0	Net present value	31 548	EUR		
1	Cost-benefit ratio	1.1			
2					
3	<i>Break-even cost for measure (per unit)</i>	521 739	EUR		
4					
5					
6	<b>COST-EFFECTIVENESS ANALYSIS</b>				
7					
8	<i>Prevented casualties</i>				
9	Fatal	0.1			

# Current status



- D3.4 “Preliminary guidelines for priority setting between measures”
- Concept version of E<sup>3</sup> tool developed (WP<sub>3</sub>)
- User manual developed (WP<sub>3</sub>)
- Reporting template available
- CBA under development for >20 measures related to education, campaigns, enforcement, infrastructure and vehicle technology (WP<sub>4</sub>, WP<sub>5</sub>, WP<sub>6</sub>)
- To be integrated in the DSS



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