

cast



What is it about you, that
you act so dangerously?

CAST Final Conference
26-27 January 2009

Project funded by the European Commission, Directorate-General Energy
& Transport, under the 6th RTD Framework Programme



cast



And can campaigns change that?

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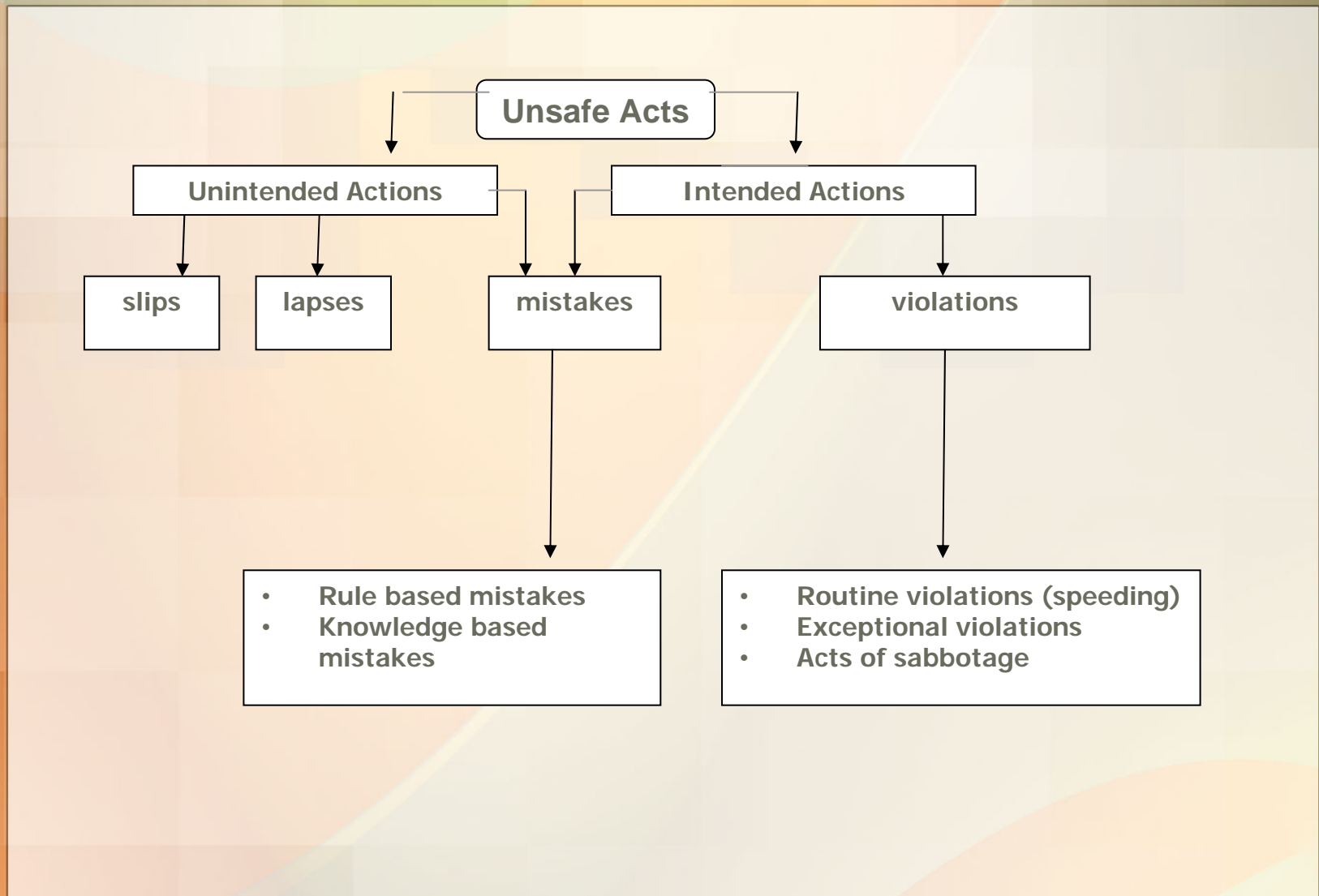


Human Unsafe Acts

- Human unsafe acts*
 - In 65% of crashes directly responsible
 - In 96% a contributing role

*Sabey&Tailor (1980)

- Conclusion: Reduce unsafe acts to improve safety
- Question: What are the limitations and possibilities of campaigns?



Unsafe Acts

Unintended Actions

- Forgetting to look
- Missing an exit
- Wrong application of traffic rules

Modified by

- Task characteristics
- Inexperience
- Distraction and inattention
- Age and personality
- Mental state (Fatigue)

Intended Actions

- No precautions
- Traffic violations

Modified by

- Knowledge
- Motivation
- Personality and age
- Gender
- Mental state (agression)

Do you act intentionally dangerous?

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- 5. Cyclist use lights in darkness**

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 - 2. Pedestrians use Reflective devices**

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 - 3. Do not drive while fatigued**
 - 4. Avoid distraction**

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 3. Do not drive while fatigued
 4. Avoid distraction
 5. Next buy Safe Car (EuroNCAP 5-star)

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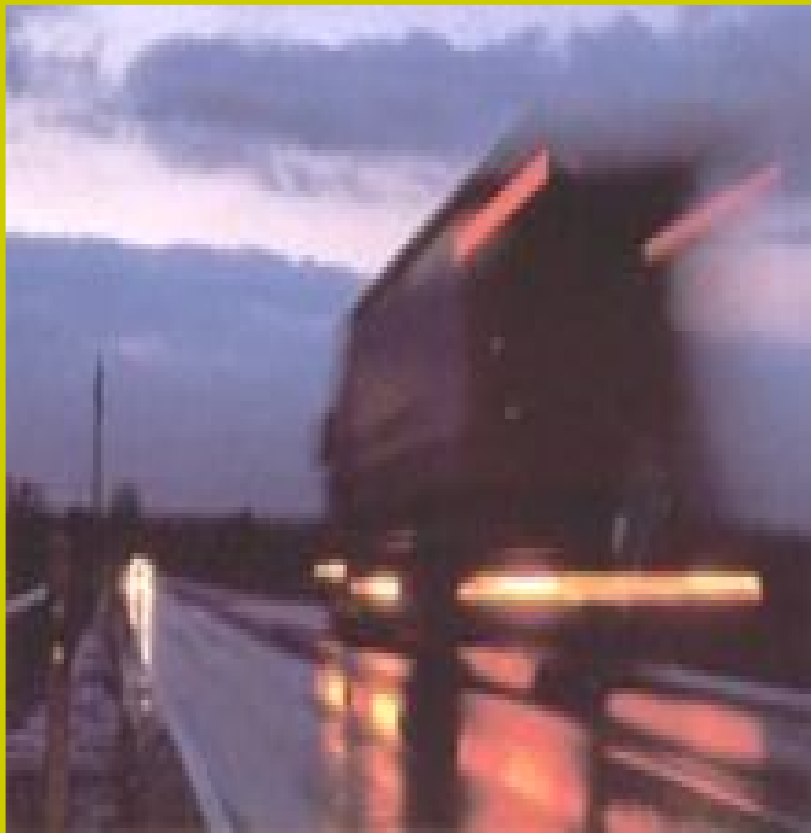
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Road safety as a system approach



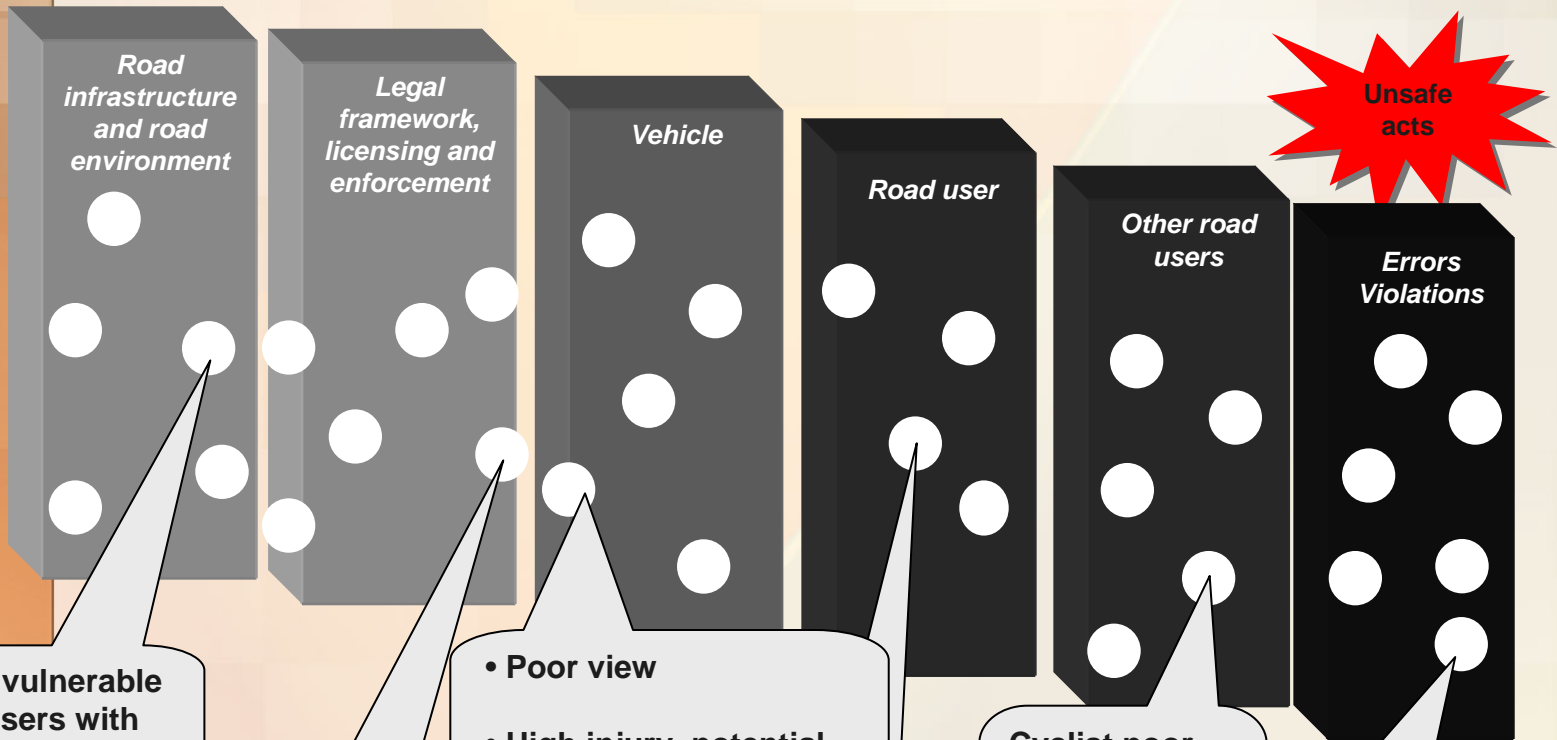
- Road traffic today is *inherently* dangerous
- Not designed with safety in mind
- Human unintended unsafe acts hard to eliminate.

1958



2008

Evolution of a latent failure



•Mixing vulnerable road users with high mass vehicles

•Effective mirrors not compulsory

•Priority rules not safe

• Poor view
• High injury potential

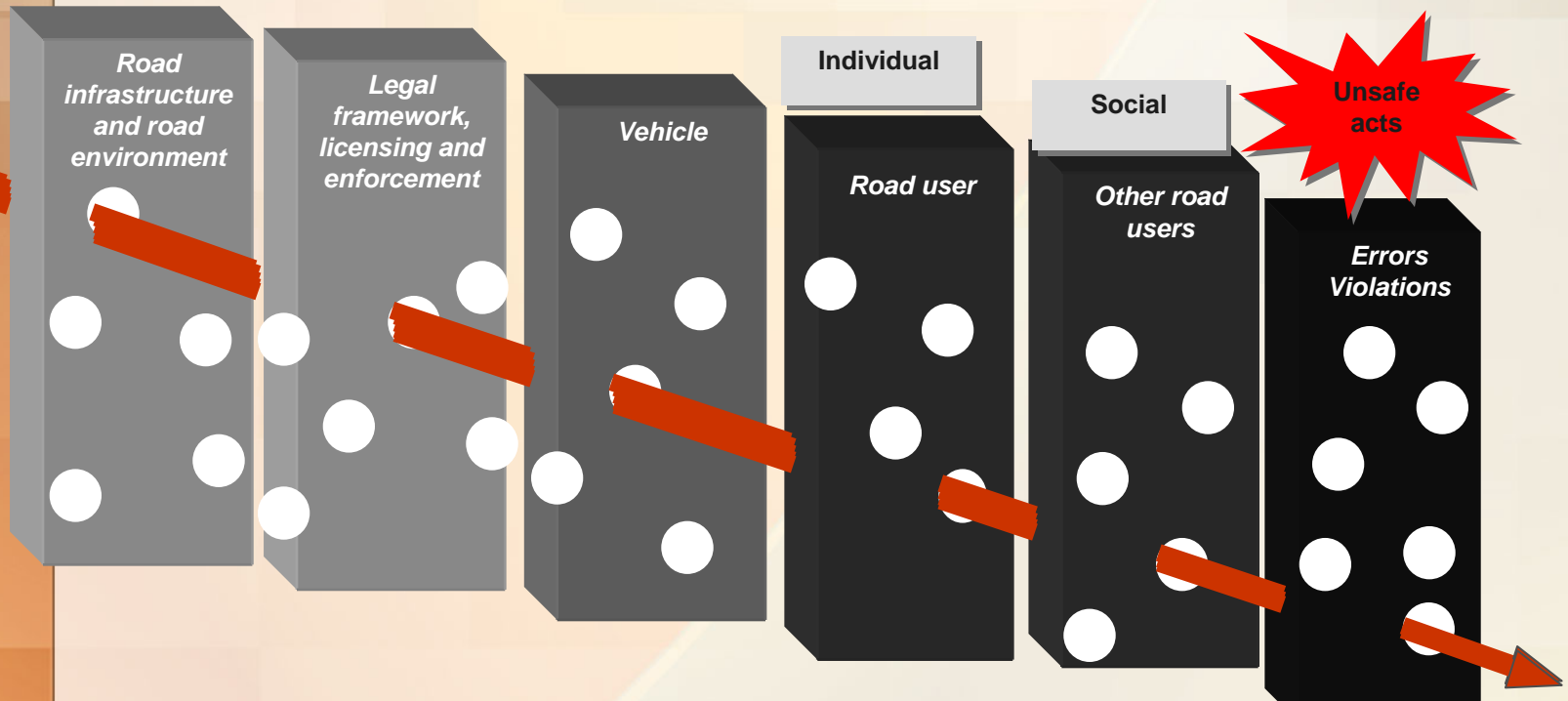
• High task demands driver

Cyclist poor Hazard perception skills

•Cyclist is overlooked (laps)

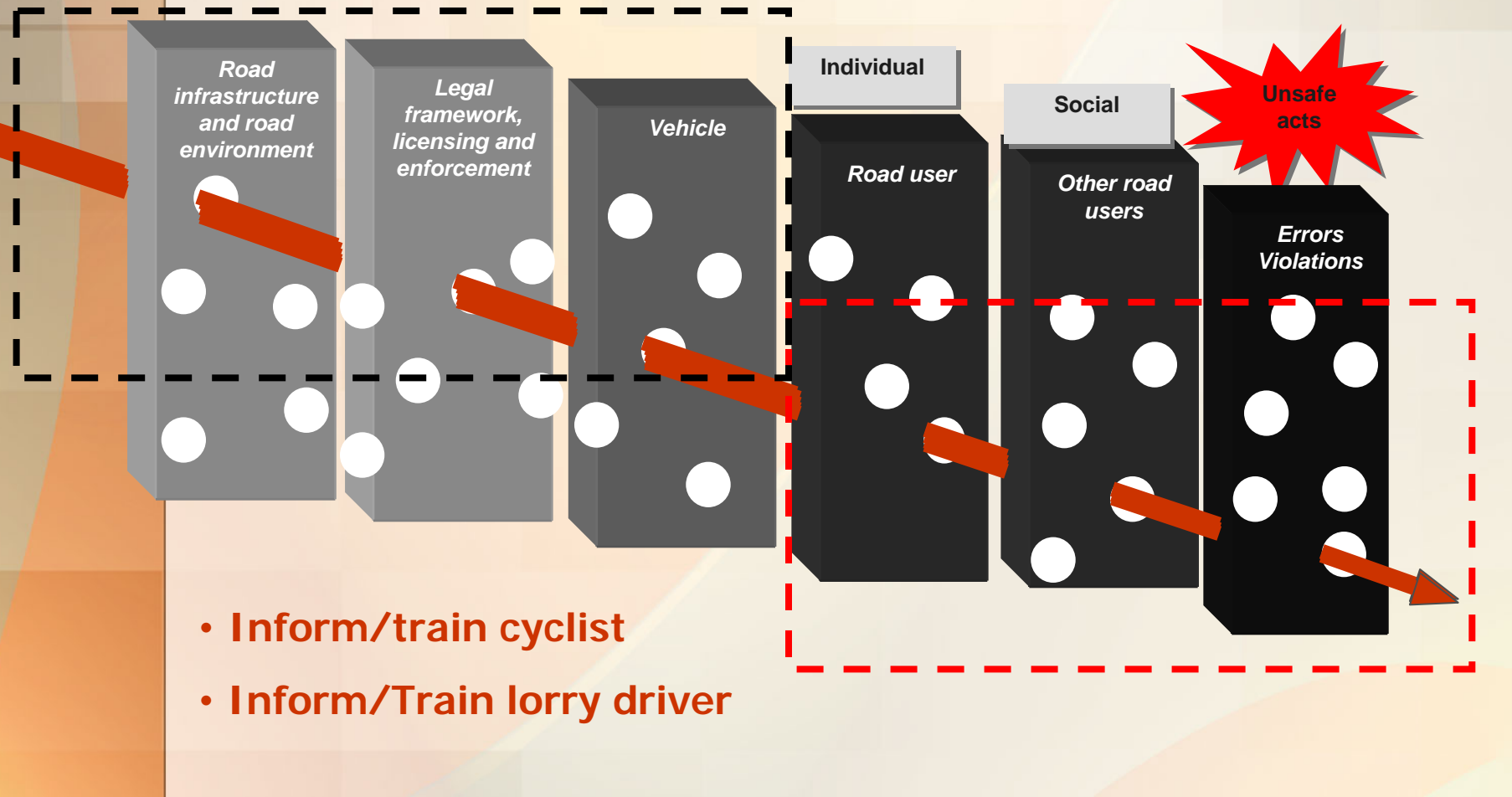
•Cyclist is not given priority (violation/error?)

Latent failure



Crash !!
+
Fatal injury

Latent failure



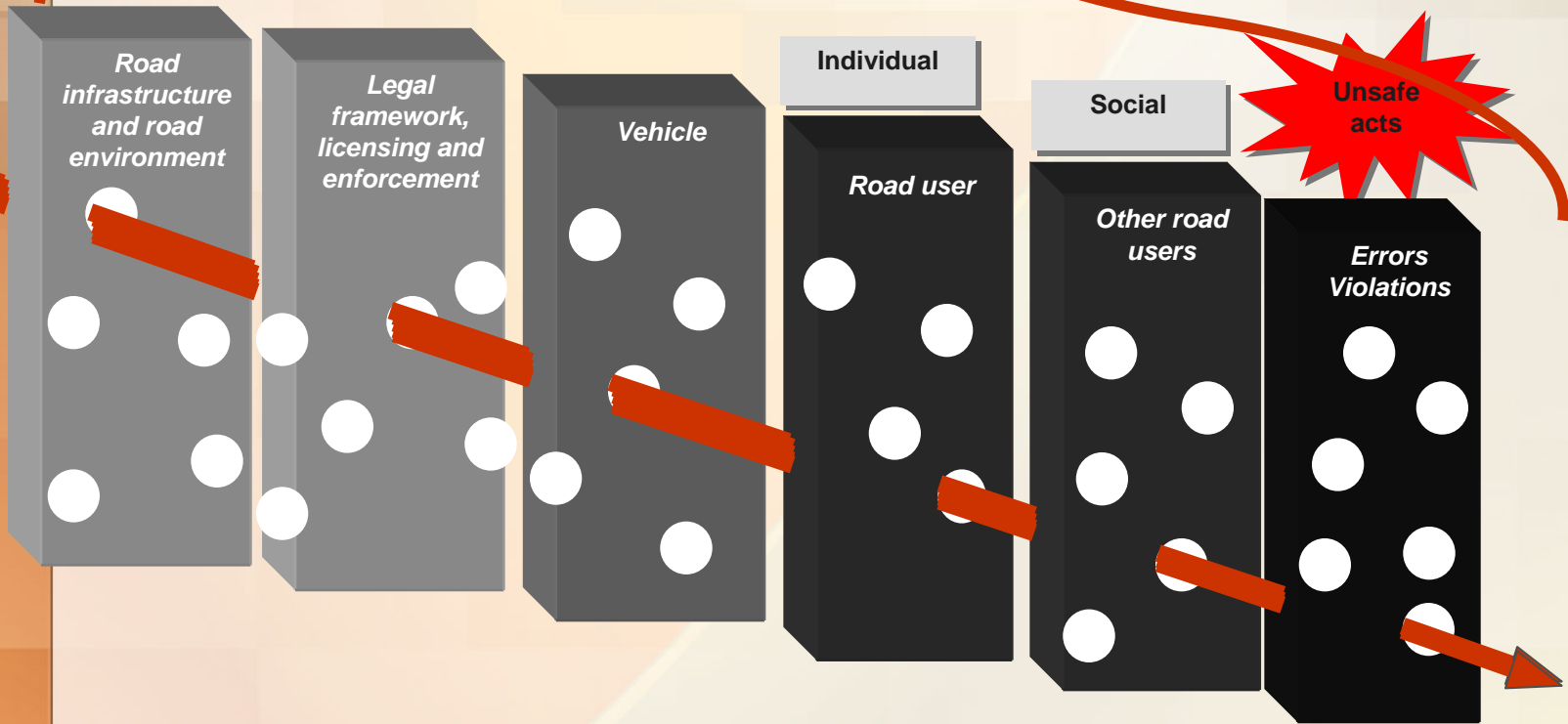
- Inform/train cyclist
- Inform/Train lorry driver

Effects system approach

- 50 -> 30 zones - 22%
- 80 -> 60 zones - 25%
- Intersect -> roundabouts - 63%



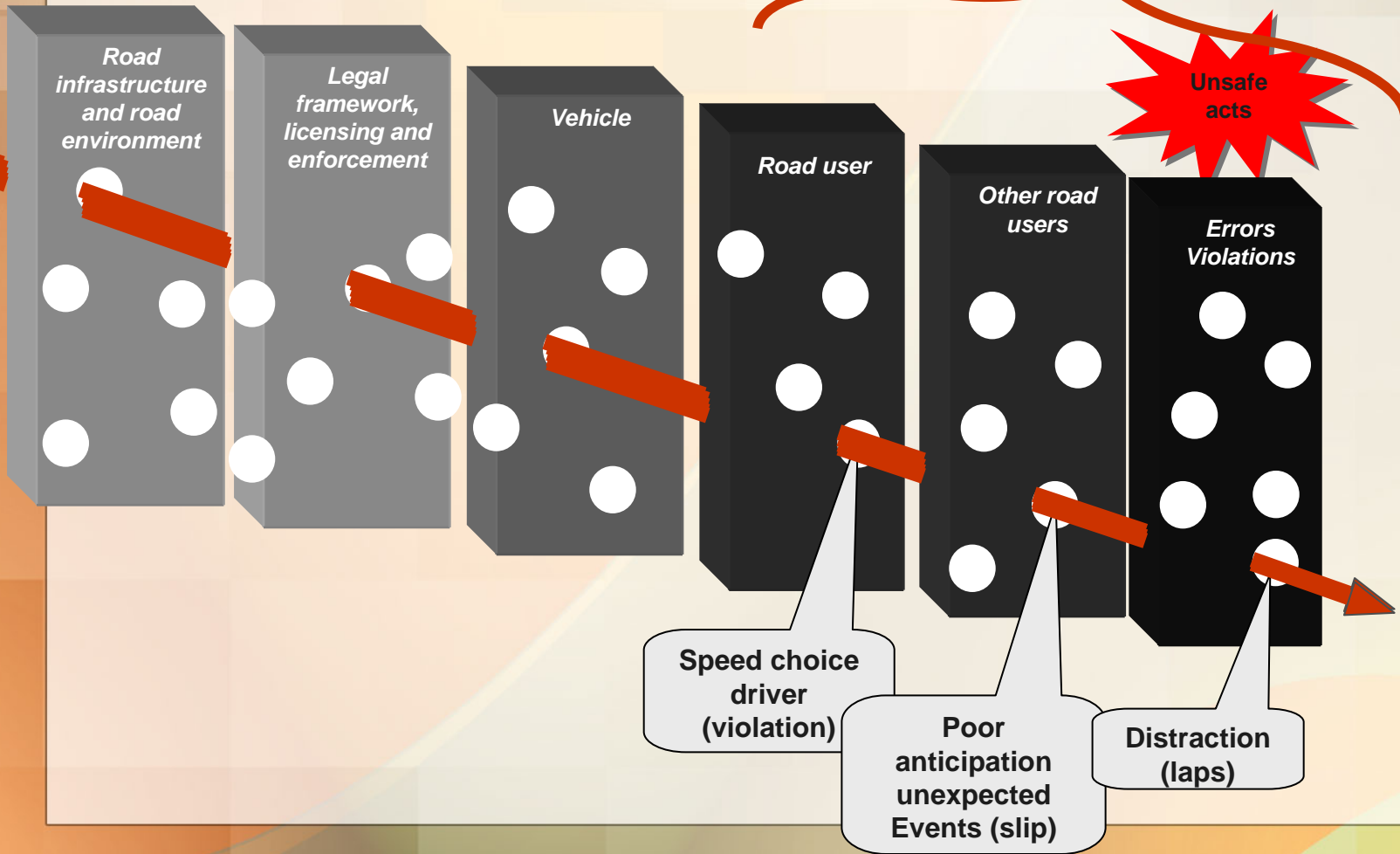
Campaigns addressing
Safe system approach



Role of campaigns (safe systems)

- **Increase problem awareness**
- **Develop acceptance of new measures**
- **Reinforce positive attitudes**

Campaigns addressing behaviour changes



So why do you act dangerously ?



- Traffic inherently unsafe
- Unintended errors and mistakes
- Intended violations ?????

What can campaigns do about that?

- **Unintended unsafe acts**
 - Increase problem awareness
 - Raise acceptance of measures
 - Reinforce positive attitudes

- **Intended unsafe acts**
 - Stimulate precautionous acts
 - Stimulate compliance of traffic rules