

PARIS  
2 ▶ 7  
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INTERNATIONAL  
RAILWAY SAFETY COUNCIL

## ▶ Human-based solutions for open-doors train departure

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# Introduction

## *Focus of the study*

- Subject :
  - Open door train departures
  
- Issue :
  - Managing the risks of these events
  
- Investigation Methodology
  - Analysis of incidents reports details
  
- Plan presentation

# The causes of open-door departures

## *Door-closing sequence*



**NON MAINTIEN  
FERMETURE  
PORTES**

# The causes of open-door departures

## ***Types of errors detected***

- Omission following an interruption (40%)

*“I can’t believe how this kind of mistake could have happened, unless a driver in Torcy asked to get into the cab when the doors were closing. The door line being clear, I put the train in movement thinking they must have been closed.”*

- Split of double capture (60%)

*“I set my train in movement and (while conversing with the Regulations Officer), I realised that there was no double beep.”*

# The causes of open-door departures

## *Comparison of the 2 causes of open-door departure*

	Break in sequence	Attention focusing
Origin	Unexpected interruption	Attentional capture
Type of occurrence	Conscious	Unconscious
Perception level during the occurrence	Perceptible	Imperceptible

# Solutions implemented by drivers

*To manage the unexpected interruption*

2 practices

*“No interruptions”*



*“Start from scratch”*

Limitations

Not always possible

Inefficient if driver  
convinced that he closed the  
doors

# Actions prospects

## *Reinforcing self-control*

① Before interrupting : Verbalizing

**INTERRUPTION**

② Before recommencing : “2-second stop”

## *Sensitizing drivers on human errors*

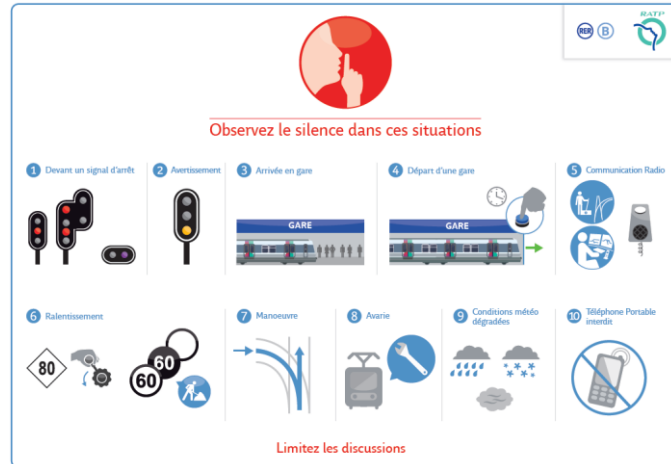
# Actions prospects

## Acting on sources of distraction

- Cab access



- Cab behaviour rules





***Thank you for your attention!***

