



**An overview of the factors associated with driver distraction and inattention within the South African railway industry**

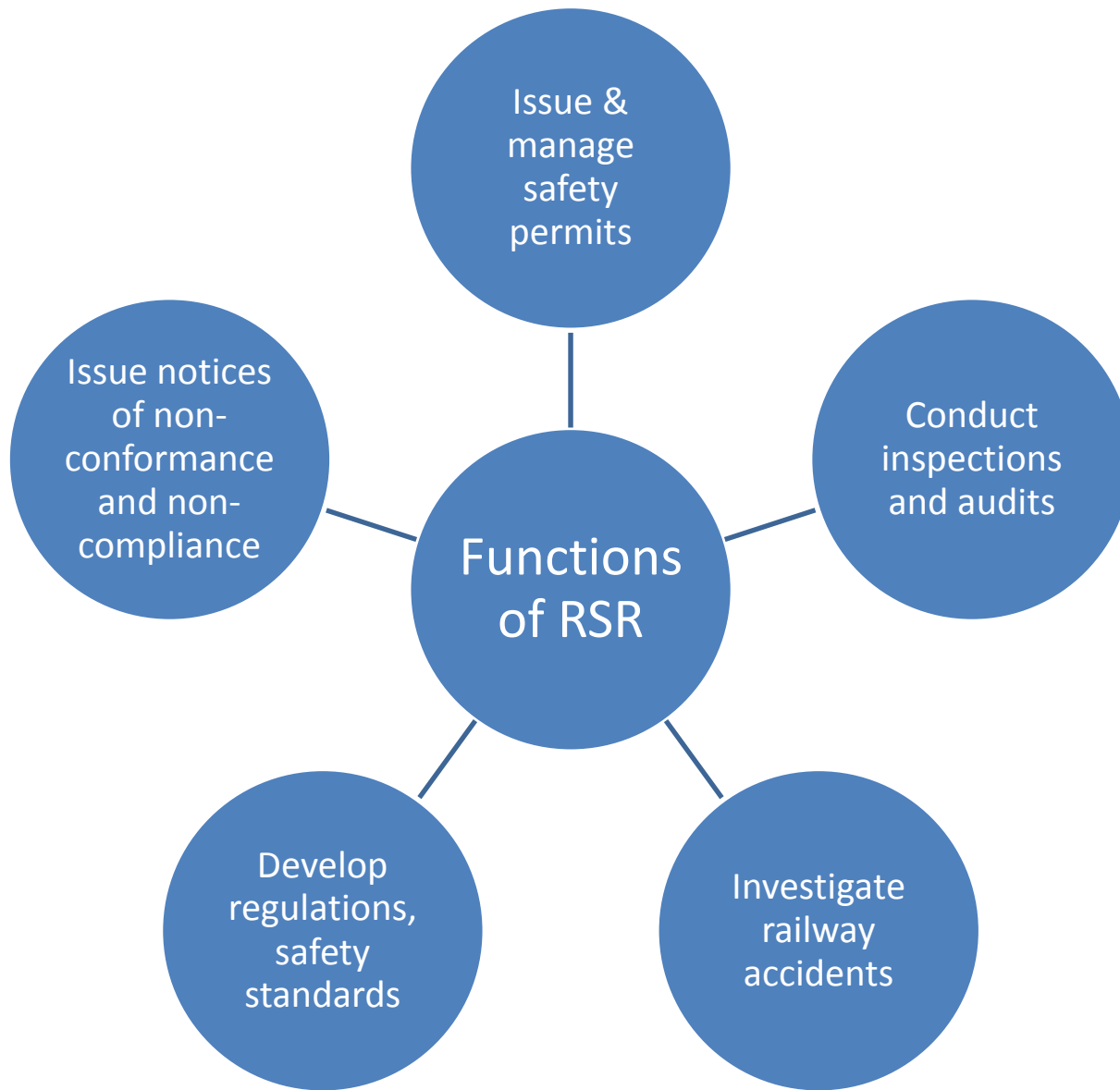
Inga Dambuza

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# Railway Safety Regulator

- Oversees and promotes safe railway operations in South Africa.
- Aspires to achieve zero occurrences within South African railways.



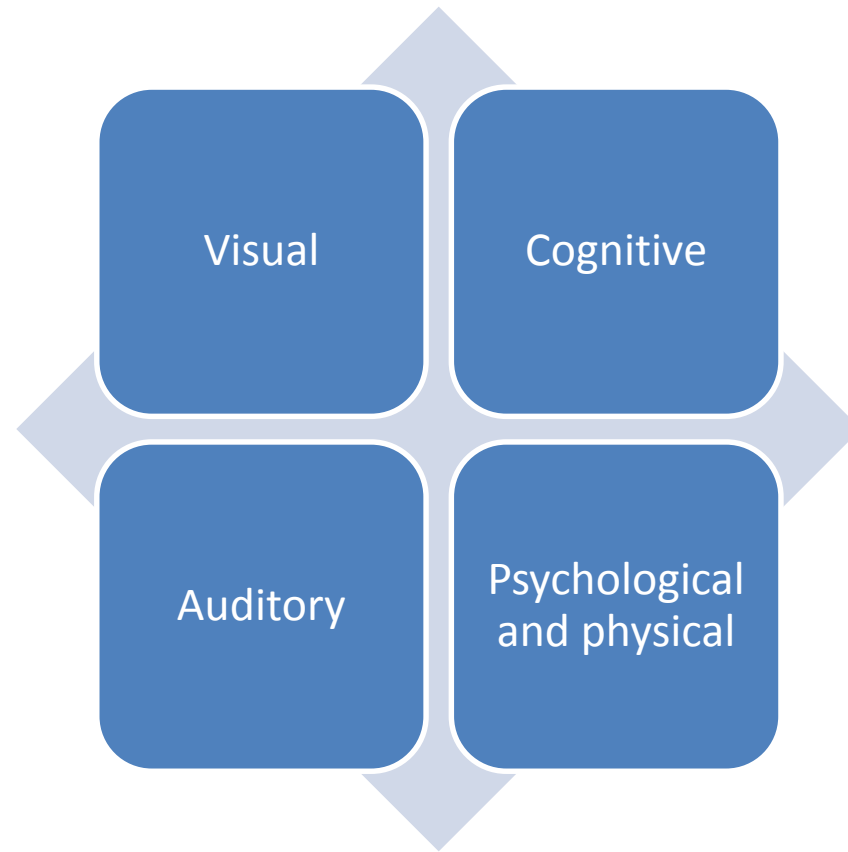


# Driver distraction defined

- American Automobile Association Foundation for Traffic Safety:  
“when a driver is delayed in recognizing information that is required to safely complete the driving task due to some event, activity, object or person within or outside the vehicle compelled to induce the driver’s shifting attention away from the driving task”



# Driver distraction and performance



# Driver distraction in SA railways

- Driver distraction has been found to play a role in railway occurrences in South Africa.
- Highest prevalence found in SPADs.
- Findings show that was a lapse of concentration in train drivers.

# Use of mobile phones

- **Wolverdiend SPAD**
  - Radio was defective
  - Train driver used cellphone
  - Received call from train manager
  - Signal was in working order
  - Found that driver was distracted by many calls was making and receiving

# Performing multiple tasks

- Schapensrust station SPAD
  - Train driver nearing end of shift and journey
  - Updating train journal and packing kit bag while driving
  - Passed signal at danger



# Physiological and psychological factors

## Crown station

- Personal problems
- SPAD

## Phillipi – Lentgeur station

- Taking medication
- Driver blacked out
- SPAD that led to averted collision

## Stellenbosch station

- Taken flu medication
- Did not declare medication at sign on
- SPAD that led to averted collision

# Other/unknown factors

- Eerste River station:
  - Train driver approached signal
  - Noticed it was at danger but passed signal
  - Does not recall what happened when he passed signal

# Mitigation strategies

- Dead man's switch
- Train driver assistant

# Dead man's switch

Location



Automatic

# Train driver assistant

- Assist train driver in operation of train.
- Have functions to support those of train driver.
- Conversing with passenger considered to be of low risk.
- Driver and assistant have personal conversations that result in driver missing vital information.

# Future considerations

- Human Factors will be part of all investigations, so driver distraction should be identified in all investigations.
- Projects underway to improve trunk radios and communication.
- Enforcement of Human Factors management standard, increased supervision and employee assistance programs.



Thank you

