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IRSC 2025

Advancing Railway Safety through Innovations and Collaborations

Hong Kong, China 25th - 30th November 2025

PREVENTION OF ACCIDENTS TO PERSONS

A collaborative approach

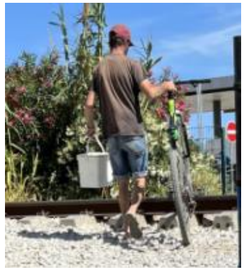
Graça Brígida

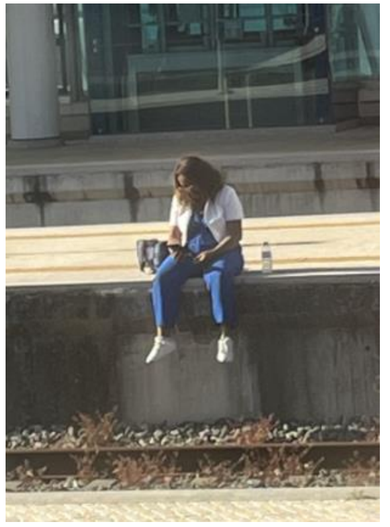
Head of National Safety Authority – **Portugal**

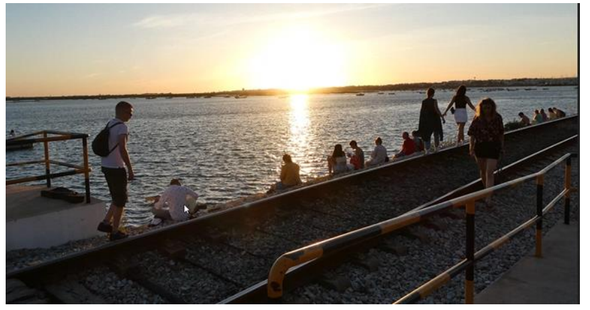
ANSF/IMT (Institute for Mobility and Transport)

BEHAVIOURS

ATENÇÃO
NA AUSÊNCIA
DE INDICAÇÃO
NÃO SINAL
PARE E SE
NECESSÁRIO







BEHAVIOURS – Passive Level Crossing

	10/08/2023 09:40 – 10:40
	138 LC users
	35% looked both ways

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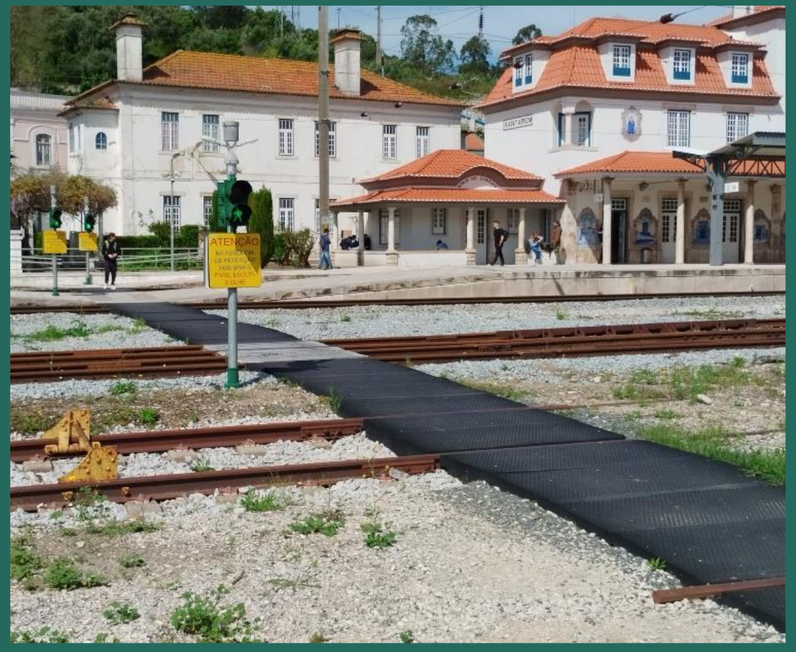
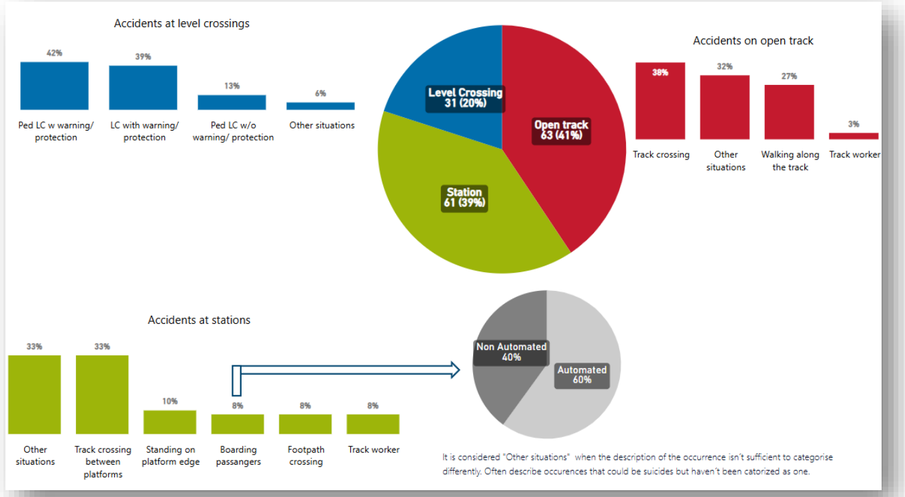
BEHAVIOURS – Passive Level Crossing



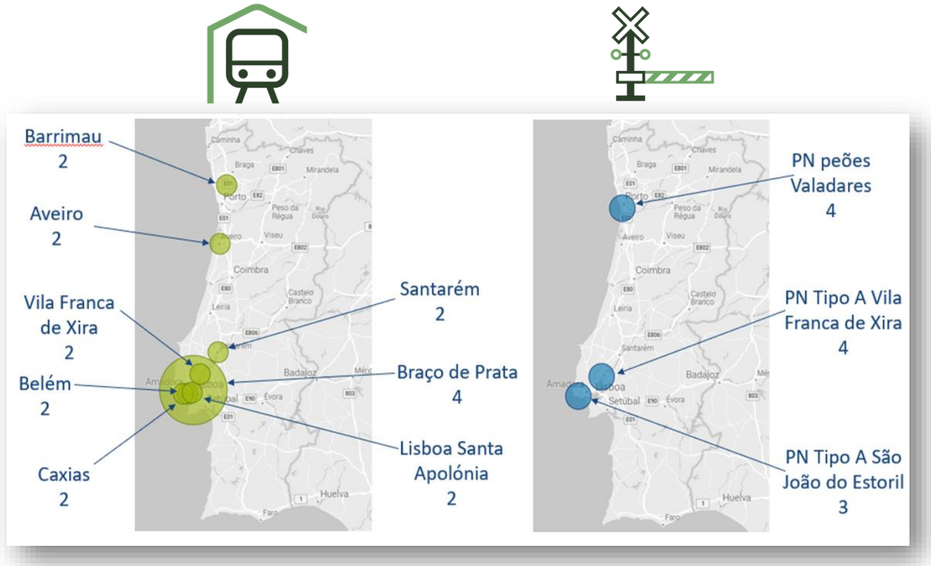
	05/04/2024 09:00 – 12:00
	178 users crossed with red signal
	1 user waited on red signal

Inadequate behaviors on the railway due to an incorrect Risk Perception

“Suicide And Trespass Accident Prevention On The Railway”



1 Categorization of Accidents



2 Critical Areas

RESTRAIL TOOLBOX

3 Measures

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WORKSHOPS

4 SESSIONS

56 PARTICIPANTS

13 ORGANIZATIONS

DIVERSE BACKGROUNDS

- Safety
- Operations
- Maintenance
- Investigation
- Councils

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WORKSHOPS

1	Trespass accidents - Main findings of study
2	“Why we must act”
3	Best practices
4	Pilot Project – Characteristics and users behaviours
5	Brainstorming of potential measures (small groups)
6	Wrap-up – Each group presented the identified potential measures and implementing organization

- Feasibility assessment by organization (~2 months)
- Confirmation – Each organization presented the measures to be implemented and planned dates.

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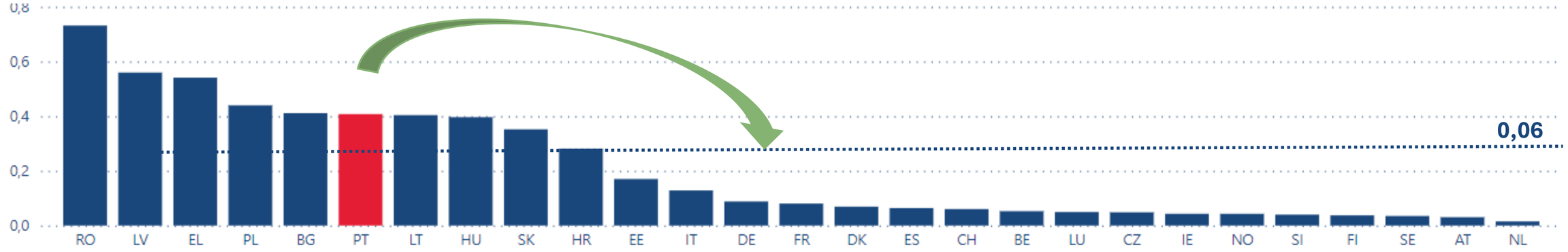
PROJECT PILOT – Pedestrian LC - Behaviors

Cost benefit analysis

FATALITIES IN ACCIDENTS TO PERSONS PER TRAIN KM (X10^6) (AVERAGE 2018-2022) (DOESN'T INCLUDE LC)



-15
fatalities/year

-6
seriously injured/year

-185h delays/year

48.6M€/year

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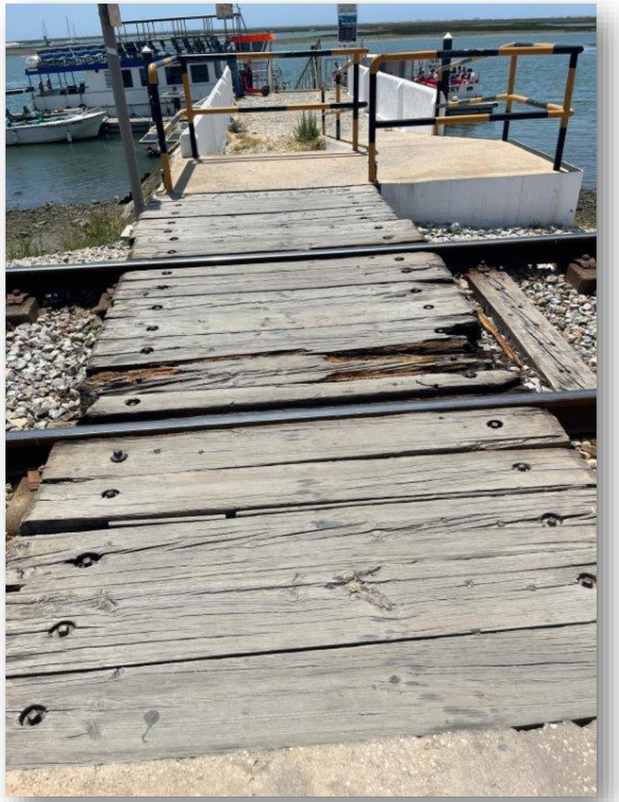
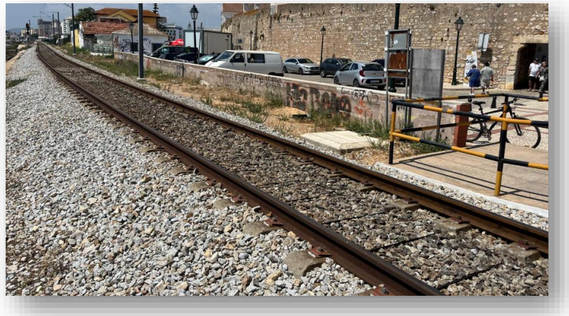
PROJECT PILOT – Pedestrian LC - Behaviors

PROJECT PILOT – Pedestrian LC - Measures



- ✓ Safety Awareness
- ✓ Painted Balustrades
- ✗ LC Gate
- ✗ Painted Pavement
- ✓ Improved Pavement
- ✓ Anti-slip Pavement
- ✗ Wider Pavement
- ✓ Yellow Box
- ✓ LC Removal

- ✗ Improved Signs
- ✓ Signage in English
- ✗ Fencing
- ✓ Dirty barrier
- ✗ Anti-trespass mat
- ✓ Reduction of info available
- ✗ Agent
- ✗ Flyover railway
- ✗ Solution to prevent people from seating



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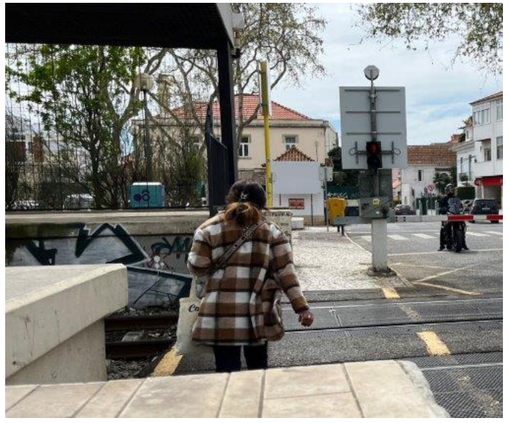
PROJECT PILOT – LC - Behaviors



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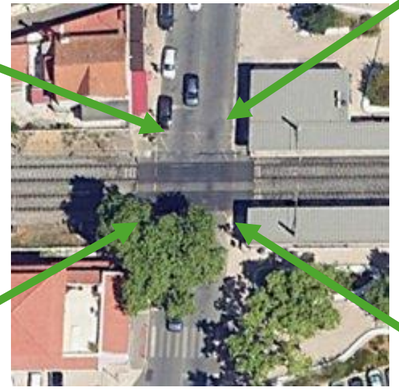
PROJECT PILOT – LC - Measures

- LC removal
- Safety awareness
- Agent
- Police presence during peak hours
- Colored pavement
- Pedestrian sign



- Pedestrian pavement marking
- Wall removal
- Tree Removal
- Change train stop position
- Underpass improvement

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CONCLUSION

- Extremely positive
- One goal
- All part of the solution
- Post workshop collaborative meetings

HONG KONG, CHINA 2025
IRSC
INTERNATIONAL RAILWAY SAFETY COUNCIL

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