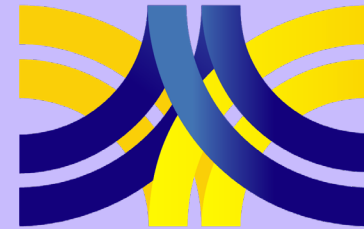


49th ASECAP DAYS

*Decarbonizing Road Infrastructure : Challenges,
Perspectives and Actions in Tough Economy*

ASECAP DAYS

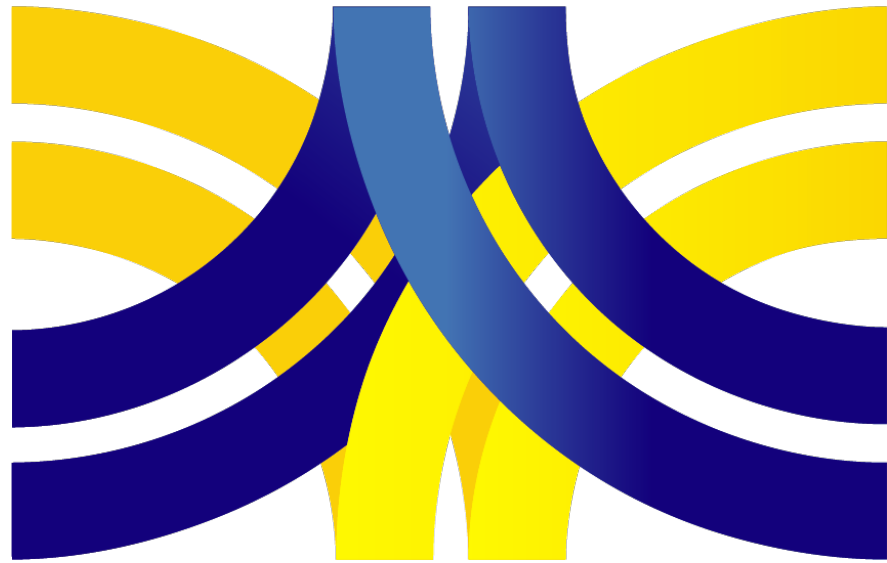


BRUSSELS 2022



Hotel Marriott Grand Place, Brussels
24 – 25 November 2022

ASECAP DAYS



BRUSSELS 2022

Vision Zero - How Portugal and Brisa are pursuing this EU objective

Diogo Torcato – diogo.torcato@brisa.pt

BRISA



- Following **Brisa's Strategic Review** and the definition of the **ESG agenda**, it was **considered strategic to raise the safety level of people on the road**
 - A multidisciplinary **Working Group** was created to **analyze, review and propose improvements in all safety procedures, processes and governance**
 - **Extend this safety capabilities to non-Brisa who work on our motorways (i.e., contractors and other providers)**
 - **Contribute to ISO 45001 certification**
- This **presentation aims to provide an overview of the work in progress** and the next steps

Secure platform – Key streams

1

Visibility & protection

- Introduce **impact attenuators (TMA)**
- Enhance **high visibility through signage** for Approach and Position for mobile works

2

Review procedures for works signage

- **Review processes considering impact attenuators (TMA) entry in operation**
- Define **procedures based on best practices** coming from international benchmark across key players

3

Review processes & governance

- **Review processes & governance in a collaborative way to ensure streamlined and robust process**
- **Clear roles, responsibilities and governance across the process**

4

Fleet visibility

- **Increase visibility of Brisa's (and externals) working fleet** operating on the road

5

Training of Brisa and external teams

- **Ensure training practice to allow acquisition on skills and exposure to new equipments and reviewed processes**
- **Increase training effort**, leveraging on training track for practical exercises

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1 Visibility & protection

Truck Mounted Attenuators (TMA)



TMA Status



	# TMA
In operation	7
End 2022	8
2023	+5
Total	20

7 TMA currently in operation

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2 Review procedures for works signage

Key objectives

- **Review procedures** for road works, **benchmarking with best practices** from European road operators
- Adapt **procedures considering use of TMA's and high visibility signage**
- **Perform training sessions in "cascade"** for the new procedures

2 Review procedures for works signage

Benchmark of best practices

- **Leverage the experience** of other concessionaires and specific regulations in some countries to transpose to **Brisa case**
- **Revisit good practices of road safety and HSE**, considering applicable regulations
- Simultaneously **identify improvement opportunities to suggest revision of works signage manual**

Examples



Germany

- Detailed phase-by-phase schemes
- Document with >1,000 pages



France

- TMA users on a regular basis

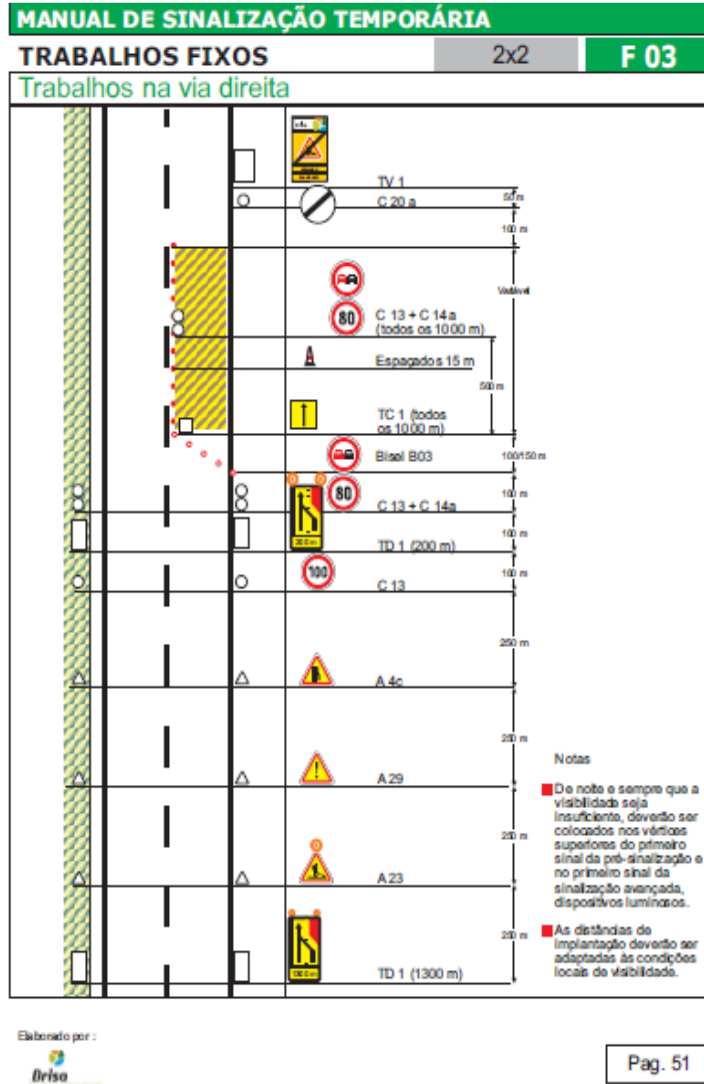


Netherlands

- Signage schemes using the latest equipment

2 Review procedures for works signage

Where we are ...



Where we are going...

Procedure

- Description of (dis)assembly phasing
- Identification of each phase, with order and way of executing
- Indication of regulations to consider

Graphic scheme

- “Photography” with each stage of the written procedure
- Clear indication of distances, signs, etc.

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Key objectives

- **High visibility depiction proposal + LED strobe + microLEDs**
- **Test of the high visibility depiction proposal on the ground**



Next steps

- **Define a “visibility kit” for service providers**
- **Change of contractual requirements with new rules**

4 Fleet visibility

Proposal (Testing in our training facility)

Vans



1 *High visibility depiction*



3 *Additional LED lightning*



4 Solution testing on the ground for high visibility

Proposal (Testing in our training facility)

Vans

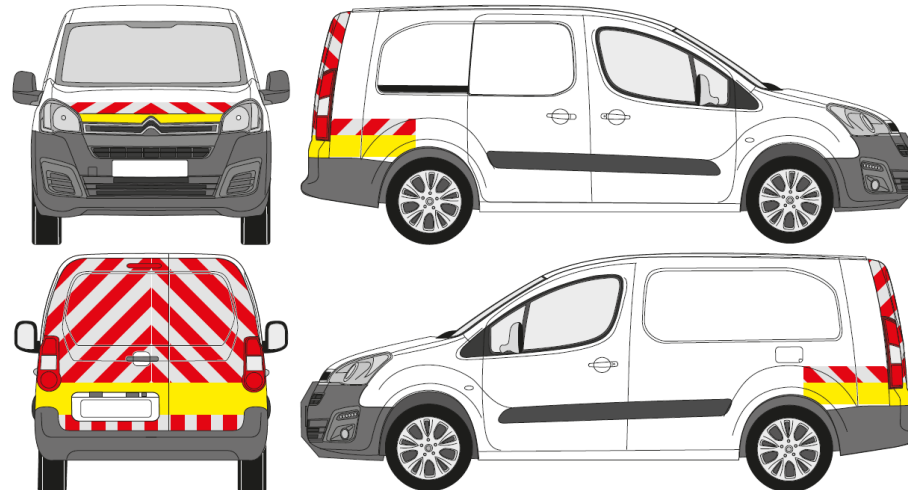


1 **High visibility depiction**



3 **Additional LED lightning**

CITROEN BERLINGO





The **work developed encompasses the know-how and experience of Brisa O&M** while embedding best practices from the sector



Motorway is a risky and tough environment as a working place, due to the constant ongoing operation – **we are working to mitigate this risk**



The objective is set and is shared across Brisa as **collective goal: “zero accidents with workers in Brisa motorways”**

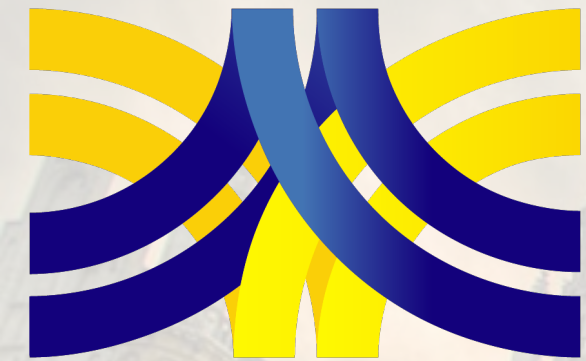


A joint effort involving key stakeholders & concessionaires is required to drive change(s) to attain the “Vision Zero” objective



Cooperation with Grantor is key for an ongoing improvement in safety standards

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**THANK YOU FOR
YOUR ATTENTION**

Brisa | Special Projects team

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