Pilot test (Liège-Carré): description of the hotspot

❖ Lots of trains running in this railway section (more than 200 trains/day);
❖ Lots of schools next to the stations;
❖ Tunnels are very narrow;
❖ Platform height is low;
❖ Population density is very high (suburbs of Liège);
❖ Very festive place (“The Carré”).
Pilot test: description of the system

- Camera with an intrusion detection algorithm;
- Sound warning when person is in the detection zone;
- Not connected to a Control Room (local);
- GOAL = influence the person’s behaviour.
Démo / Concept

Anti-trespass camera: a pilot test in Belgium
Results

❖ System accuracy
- 8 periods of analysis (10 days);
- 70% of alarms were justified (presence of a person in the detection zone);
- 30% of false alarms
  - Train detection (60%);
  - Reflection problems (30%);
  - Animals (10%).

❖ Safety / Punctuality Results
- Good results (80% reduction in the number of intrusions- 2016/2017 compared to 2018);
- 800 minutes saves in the section (2017 compared to 2018)

<table>
<thead>
<tr>
<th>Number of intrusions (before installation of the system)</th>
<th>Number of intrusions (after installation of the system)</th>
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<tbody>
<tr>
<td>11 cases (average 2016-2017)</td>
<td>2 cases (2018), 0 (2019)</td>
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<td>5417 min</td>
<td>4619 min</td>
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</table>
Improvement of the system

• Installation of timers so that staff can disable the voice system (for 2 hours) during work / maintenance in the tracks;

• Installation of signs prohibiting the crossing of tracks at the entrance to tunnels;

• Awareness-raising among company personnel (videos on the intranet) and staff in the area concerned (Safety Flash).
Conclusion

• Reduction of the number of intrusions and improvement of punctuality thanks to the installation of cameras;

• Good communication both internally and externally;

• Possibility to extend this installation to other hotspots in the future based on the good results recorded.
Anti-trespass camera: a pilot test in Belgium

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