

STIB / MIVB Business Unit Tram

17/10/2018



Who are we?

STIB = Société des Transports
Intercommunaux de Bruxelles



An integrated network

- STIB

- > Leading urban public transport company in Belgium
- > Operates an integrated network **+/- 700km**



An integrated network

- 4 metro lines
- 18 tram lines
- 50 bus lines
- 11 night bus lines



Our tram fleet



65 PCC T7700



61 PCC T7900



51 BN ALSTOM T2000



150 FLEXITY OUTLOOK T3000



70 FLEXITY OUTLOOK T4000

Location of our tram depots



BU Tram

- 7 depots
- 3 districts

District North-Center

- Haren
- Schaerbeek

District East

- Ixelles
- Woluwe

District South West

- Avenue du Roi
- Marconi
- Molenbeek

The tram network

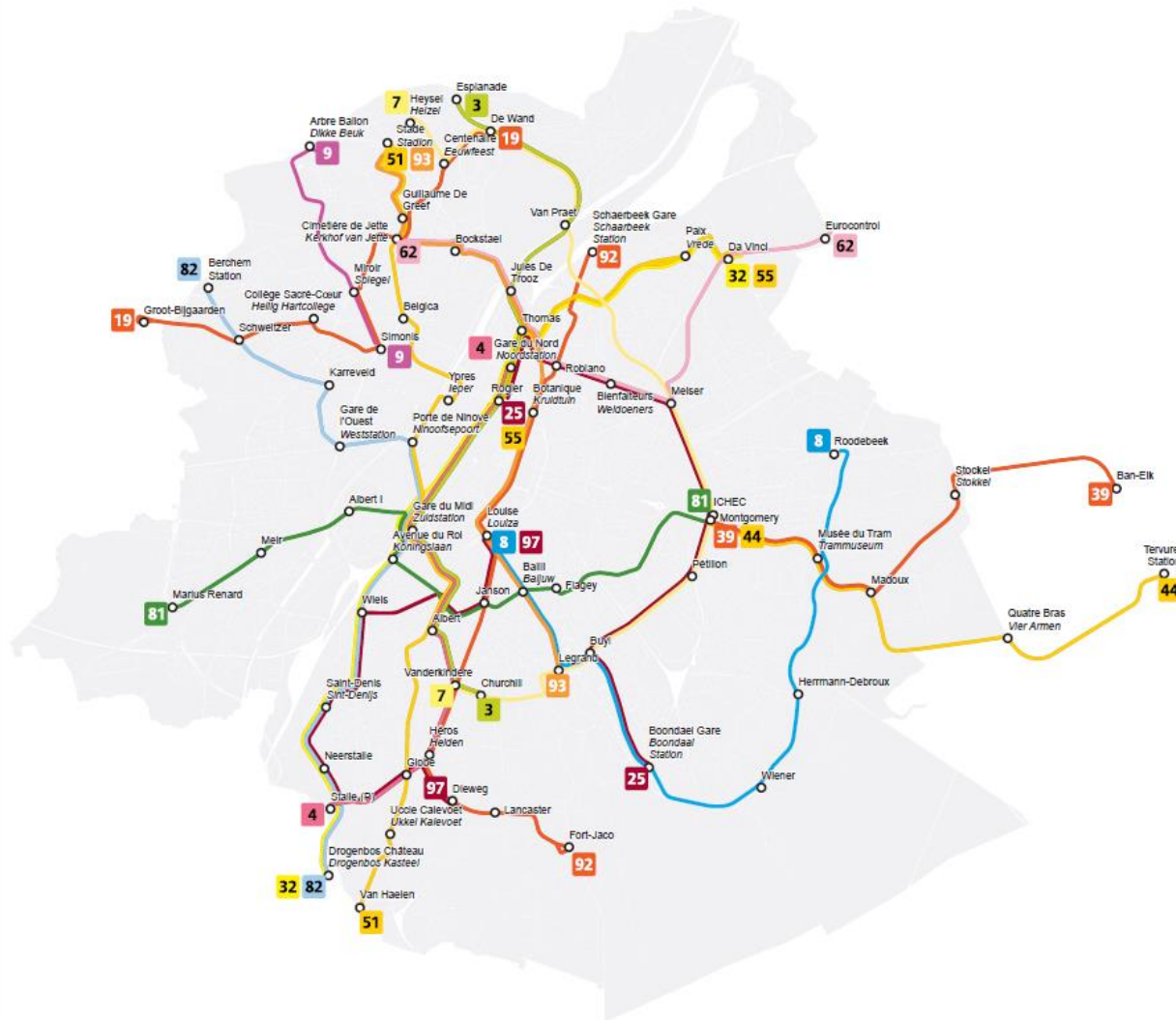


The actual tram network

Tram
29/09/2018

Légende - Legende

- T 3** Esplanade - Churchill
- T 4** Stalle - Gare du Nord
Stalle - Noordstation
- T 7** Vanderkindere - Heysel
Vanderkindere - Hezel
- T 8** Louise - Rodebeek
Louiza - Rodebeek
- T 9** Simonis - Abre Ballon
Simonis - Dikke Beuk
- T 19** De Wand - Groot-Bijgaarden
- T 25** Rogier - Boondael Gare
Rogier - Boondaal Station
- T 32** Da Vinci - Drogenbos Château
Da Vinci - Drogenbos Kasteel
- T 39** Montgomery - Bari-Eik
- T 44** Montgomery - Tervuren Station
- T 51** Van Haelen - Stade
Van Haelen - Stadion
- T 55** Da Vinci - Rogier
- T 62** Gmeière de Jette - Eurocontrol
Kerkhof van Jette - Eurocontrol
- T 81** Montgomery - Marius Renard
- T 82** Berchem Station - Drogenbos Château
Berchem Station - Drogenbos Kasteel
- T 92** Schaerbeek Gare - Fort-Jaco
Schaerbeek Station - Fort-Jaco
- T 93** Stade - Legrand
Stadion - Legrand
- T 97** Louise - Dieweg
Louiza - Dieweg



0 500 1.000 2.000 3.000 4.000
m

General informations

- 18 tram lines (4 Chrono lines – 1 evening line)
- 281,8 km of tracks (70 % in segregated tracks)
- 12,1 km in tunnel
- 14,6 km premetro to operate 15 stations
- Operation of 742 stops overground
- Commercial speed of 16,1 km/h
- 14,8 millions realized kms to transport more than 144 millions of clients (\pm 395.000 travellers a day)
- More than 300 trams on the network during rush hour

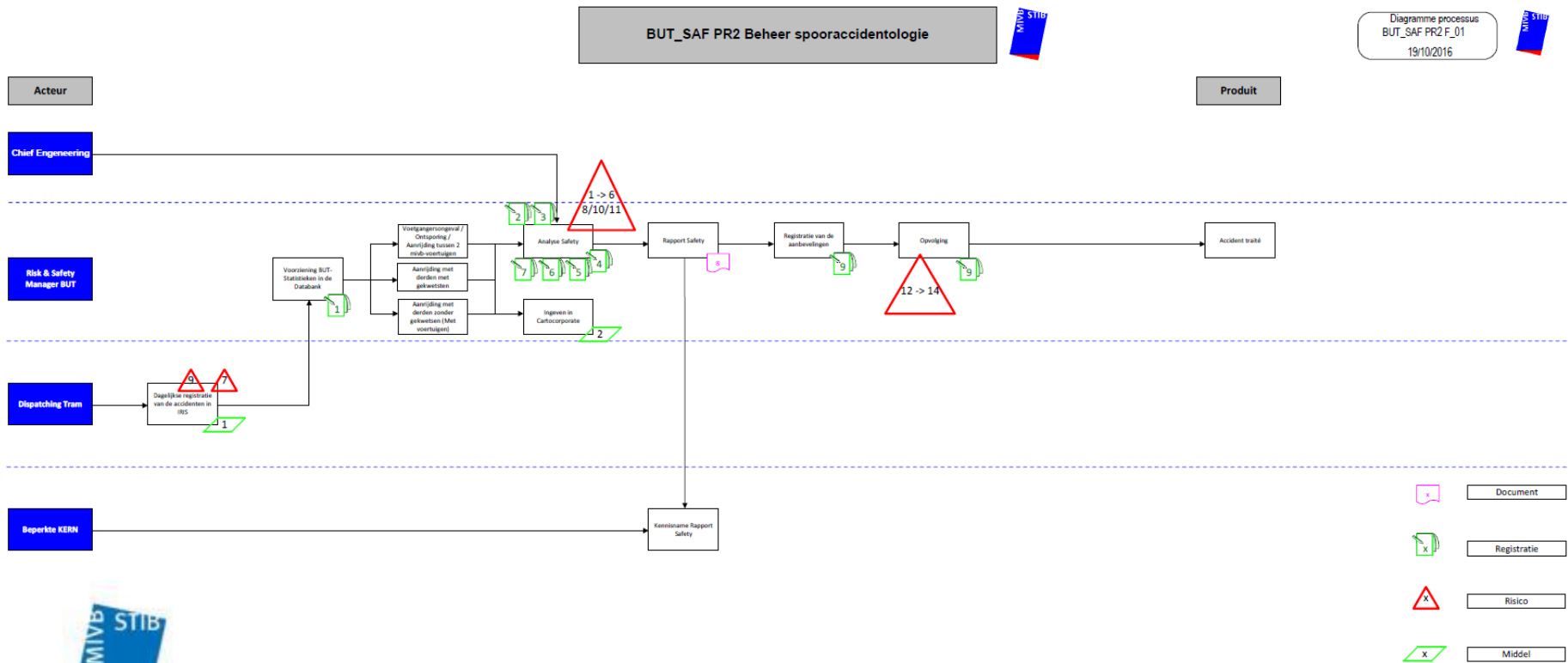


Business Unit Tram ISO9001/2015 certified



ISO9001/2015 certified

- Since 2016 the process to make a Safety Analysis of an accident is ISO 9001/2015 certified



Actions



Actions

- **18 Safety roadshows (February – May 2017)**

2 hour safety presentation given to local staff of every depot

To install a total Safety Management by raising awareness of local staff

After Safety roadshow – safety department will work 1 day a month in one of the depots

- **Safety analysis of every accident with injuries & vulnerable roadusers**



Actions

- **Dashboard KPI Safety**

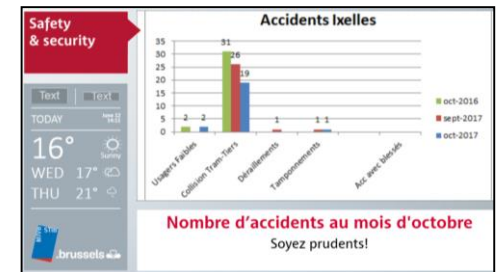
Dashboard with all safety KPI data up to date till previous month, contains:

- Accident rates as per month / depot / driver / line
- Number of collision as per seniority
- Compare lines



- **KPI on screens**

Short safety messages are being looped on TV-screens in the room were the driver has to present himself before taking his service



Actions

- **Safety movies**

Each year a short movie is made in collaboration with the training department

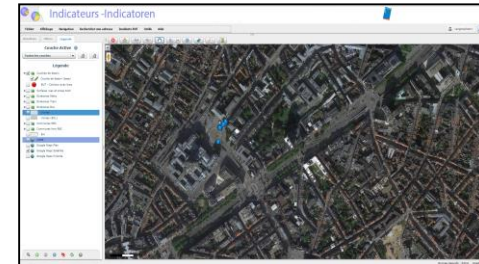
E.g: difference in braking distance between maximum electrical braking and emergency braking



- **Cartocorp**

Every single accident is being plotted on a map with the purpose:

- Determine hotspots
- Compare the situation before/after infrastructural changes
- Statistical analysis
- Quickly retrieve the number of accidents at any location



Actions

- **Safety messages**

Short safety messages are being looped on TV-screens in the room where the driver has to present himself before taking his service



- **Filmed Roadbooks**

Each line was filmed in both directions, this gives drivers the opportunity to rediscover a line which they haven't performed for a while



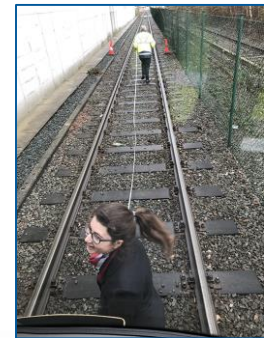
Actions

- Safety campaigns & flyers



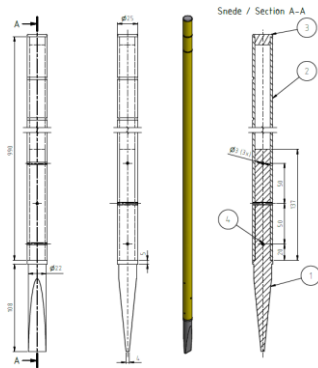
->Theme 2018: Hold yourselves

- ECHO 5 : 1 day/year practical training for each driver

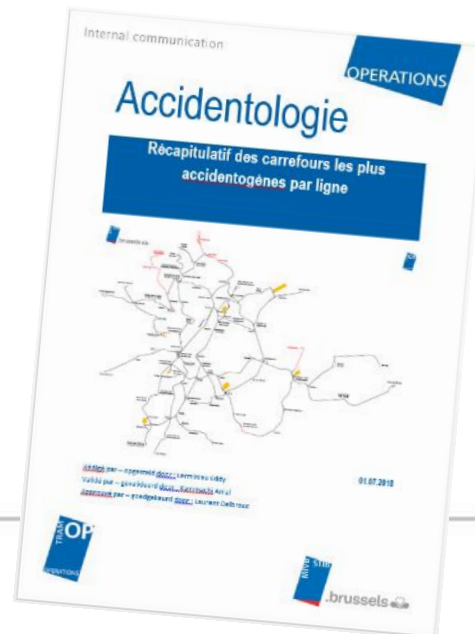


Actions

- Risk assessment of risks while driving a tram
 - > new bar to change manually the switch position



-> Safety Roadbooks



.brussels

Actions

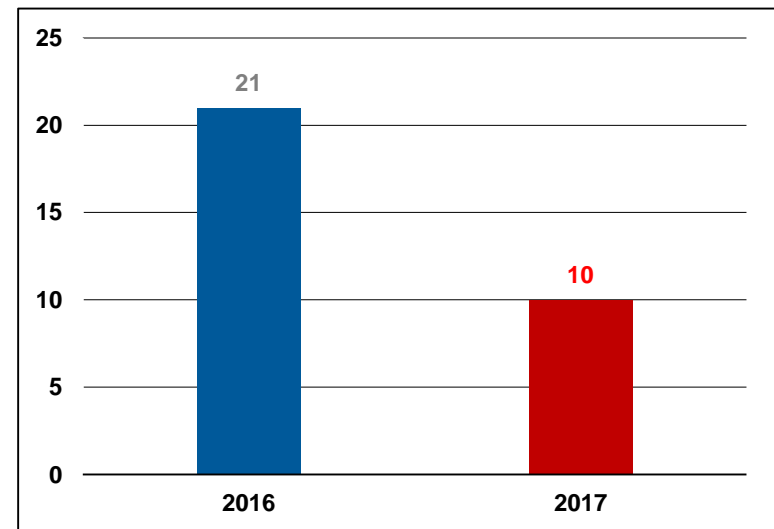
- **Generaal Meiser Plein**



Installation of A49 traffic sign which starts blinking whenever a tram is approaching -> this reduced the number of accidents by half



Number accidents Meiserplein



Results



Results

- Number of accidents with injuries diminished



2016: 102

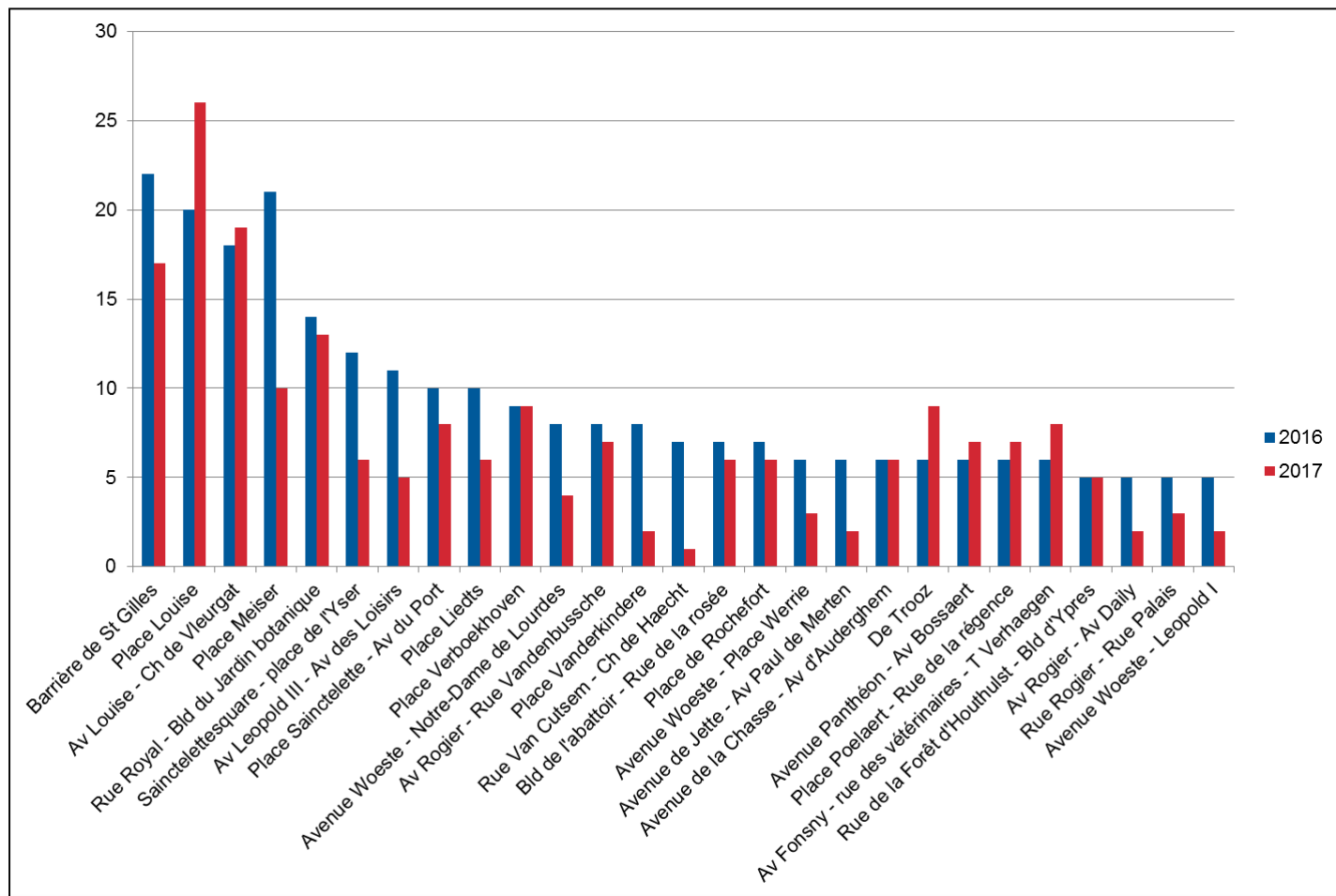
- 16%



2017: 86

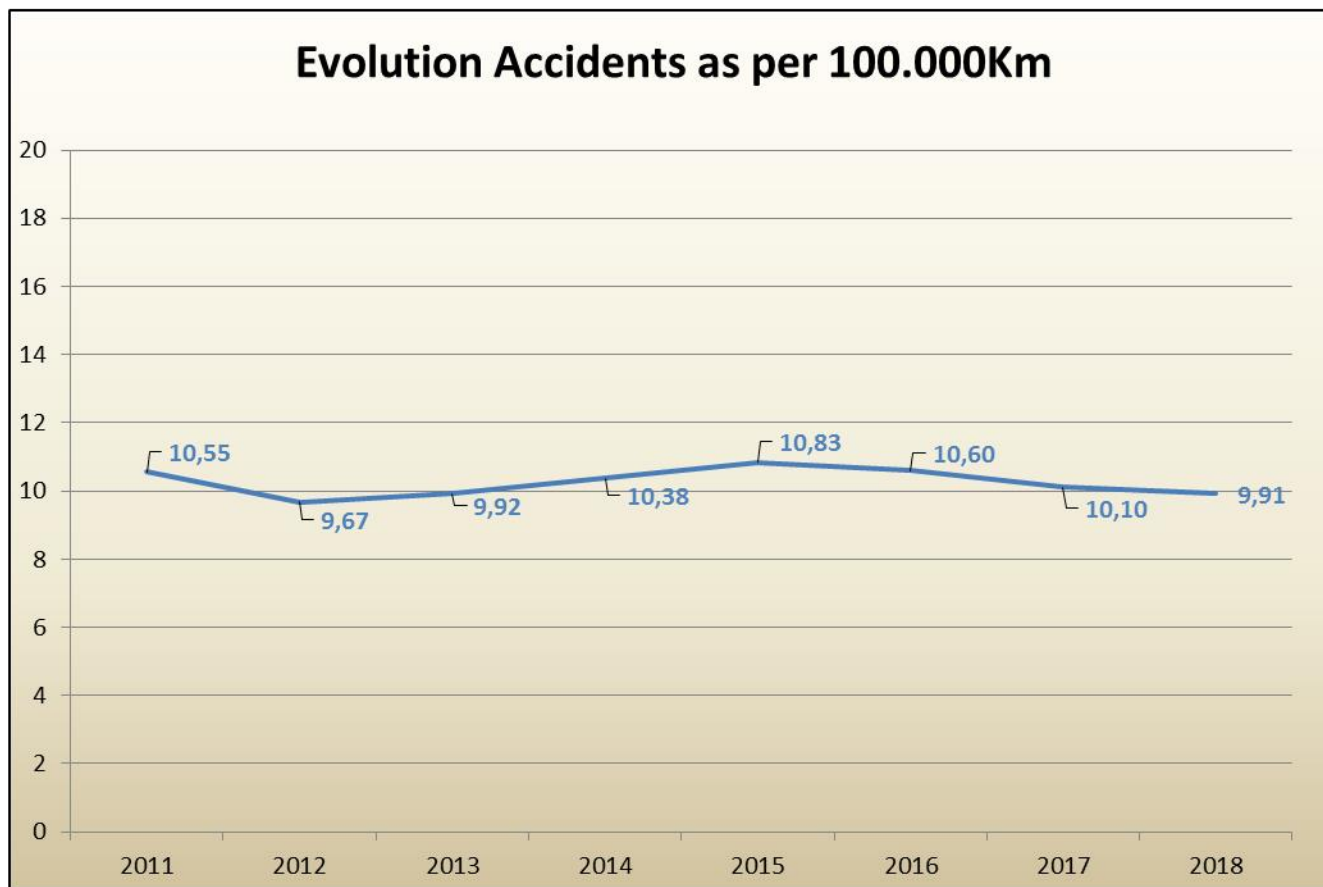
Results

- Less accidents at intersections considered as a hotspot



Results

- Evolution of accidents as per 100.000Km



The Future...



175 new trams

- Equipped with an obstacle detection system

