Experiences and results of bus crash

Informal document GRSG-123-14 (123nd GRSG, 28 March-1 April 2022 Agenda item 2(a))





Klaratunneln 2019-03-10

- M3 class 1 collided with a height restriction portal
- Year 2018, articulated, CNG propulsion system
- A gas-cylinder was penetrated and pushed down through the roof and filled the passenger compartment with gas
- The gas-cylinder then flew away and hit a house facade 13 m up
- The vehicle caught fire, ignition source unclear



Investigations of increased safety of gas buses

Basis for the investigations:

- Knowledge
- Safety culture
- Infrastructure
- Service and maintenance
- Construction and materials



Measures - implemented

Knowledge

- Driver education
- Rescue services

Safety culture

Public transport operators

Infrastructure

Regulations concerning constructions at roads



Measures - under consideration

Infrastructure

Geofencing

Service and maintenance

Facilitation of retrofitting of systems and functions on vehicles in service

Construction and materials

- Vehicle height information for driver
- Driver support systems
- Measure for penetration of passenger compartment
- Protective structures for energy storage systems



Construction and materials

- Vehicle Height Information improvement or ineffective?
- Support system warning or active?
- Passenger compartment integrity room for improvement?
- Protective structures or breakaway features?











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Questions and comments

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