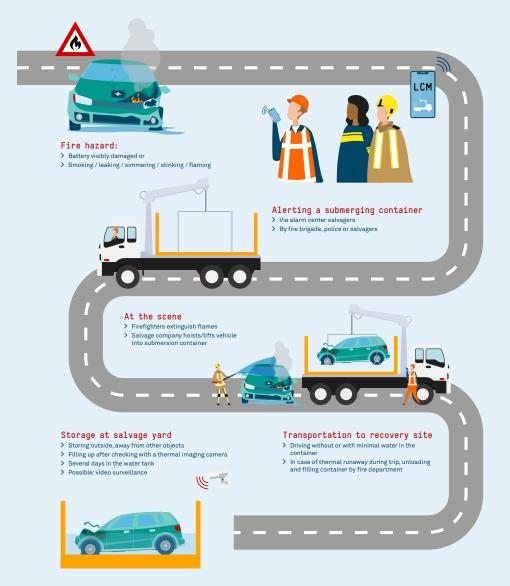
# Submerging container and its possible alternatives a comparative assessment study



# Deployment of submerging container



# Techniques for battery packs of electric vehicles

# Scenarios



- > Fire in electric passenger vehicle
- > Battery pack involved
- > Vehicle easily accessible

## 1st choice technique

Fire-access in battery pack

### 2nd choice technique

Submerging of an electric vehicle in a submerging container



- > Fire in electric passenger vehicle > Battery pack involved
- > Vehicle poorly accessible
- 1st choice technique

#### Fire-access in battery pack

## 2nd choice technique

BEST battery extinguishing system



- > Risk of thermal runaway

## 1st choice technique

Place in submersion container without water

#### 2nd choice technique

- > Fire blanket
- > Mobile sprinkler
- > Aerosol container

NIPV examined twelve techniques in three scenarios involving the battery pack of an electric vehicle. The techniques were assessed on the following criteria: safety of firefighting personnel, safety of recovery personnel, cooling effect, environmental impact, collateral damage vehicle, deployment time and practicality.

#### Submerging container alternatives and their applicability to incident management activities

Method	Extinguishment	Suppression	Transport
Submerging container	X		Х
Aerosol container		Х	Х
Cobra Coldcutter	X		
E-Extinguishing Lance	X		
Mobile sprinkler		Х	
Mobile submerging unit	X		
Fire blanket		Х	
Transportation blanket		Х	X
BEST battery extinguishing system	X		
Extinguishing bag	X		Х
Fire-access in battery pack	X		
Let the vehicle burn out	X		



Want to know more? Read the report Research Submersion containers - An assessment of the submersion container and possible alternatives on nipv.nl