HERE Technologies is the first to develop automotive services based on rich vehicle sensor data, pooled across multiple car brands. At HERE, our vision is to make driving safer and more enjoyable for billions of people around the world by creating a live depiction of the road environment.

HERE Hazard Warnings is a cloud-based service derived from rich vehicle sensor data to create a depiction of road conditions in real-time. The service delivers targeted alerts to drivers traveling through areas affected by a road hazard, distributed via connected infotainment systems or through the vehicle’s ADAS functions. Low-latency hazard information is delivered in just seconds. The service relies on data from vehicle sensors such as wipers, SRS airbag, ABS events and more to create the following types of warnings:

- Accident warning
- Broken-down vehicle warning
- Slippery road warning
- Reduced visibility warnings, including fog and heavy rain
| Use Cases | · Information service for connected infotainment systems  
| Format | · TPEG XML  
| Location Referencing | · Open LR  
| Latency | <20 sec  
| Life-Span of Each Message | 30 min unless extended by a subsequent incoming message  
| Coverage | · Western Europe  
| · North America  

**Sensor data fusion required to generate and send an outgoing message for HERE Hazard Warnings**

**Examples**

- **Hazard Lights**
  - Hazard lights active
  - Door open
  - V=0km/h

- **Electronic Stability Control**
  - ABS/ASR active for > 500ms
  - V=> 10Km/h

- **Ultrasonic Parking Sensor**
  - Low-beam light
  - Rear fog light
  - V=>7km/h

- **Ignition**
  - Wiper state
  - Rain sensor
  - V=>7km/h

- **Video Camera**
  - Airbag deployment
  - Automatic e-Call

- **GPS**
  - Slippery road
  - ABS/ASR active for > 500ms
  - V=> 10Km/h

- **Windshield Wipers**
  - Fog
  - V=>7km/h

- **Brake Pressure**
  - Reduced visibility
  - Low-beam light
  - Rear fog light
  - Wiper state
  - Rain sensor
  - V=>7km/h

- **Headlights**
  - Heavy rain
  - Wiper state
  - Rain sensor
  - Low-beam light
  - V=>7km/h

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**About HERE Technologies**

HERE Technologies, the Open Location Platform company, enables people, enterprises and cities to harness the power of location. By making sense of the world through the lens of location we empower our customers to achieve better outcomes – from helping a city manage its infrastructure or an enterprise optimize its assets to guiding drivers to their destination safely. To learn more about HERE, including our new generation of cloud-based location platform services, visit [http://360.here.com](http://360.here.com) and [www.here.com](http://www.here.com)

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