

# SAFESPOT INTEGRATED PROJECT - IST-4-026963-IP

## DELIVERABLE



### SP3 – SINTECH – Innovative Technologies

#### *Vehicular Ad Hoc Networks Specifications*

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## EXECUTIVE SUMMARY

The SAFESPOT Vehicular Ad Hoc Network (VANET) is responsible for message exchange between vehicles or between vehicles and road side units.

The cooperative SAFESPOT applications rely on a stable and reliable VANET, Therefore the VANET specifications include means to maintain the network (*Beaconing*) and to keep it reliable and stable (*Congestion Control*).

The main task of the VANET is the information distribution. For this purpose the VANET offers a variety of transmission schemes, e.g. *multihop routing* and *geocast transmission*. With *Stored Geocast* the VANET is tuned to various traffic scenarios, especially low and high traffic density scenarios with high and low penetration rates.

The *multihop* and *geocast* information distribution scheme rely on efficient *geo-addressing*. It is most important for the applications to understand the relationship between *Relevance Function*, *Geo Address* and *Destination Area*.

Safety applications often require a message transmission with low latency. For this reason *priority handling* together with an appropriate *channel usage* scheme are specified.