

*Amendment***EXHIBIT 1**

Raytheon Systems Company's Highway Transportation Management Systems unit has a contract with a highway builder in Israel to provide a Dedicated Short Range Communications System (DSRC) integrated into an Electronic Toll and Traffic Management System for deployment on the Cross-Israel Highway. Raytheon's contract reference number is L299289. The DSRC system to be deployed on the CIH will be in compliance with the following two specifications: ASTM Specification PS111-98, Standard Specification for DSRC Physical Layer Using Microwave in the 902 to 928 MHz Band; and, IEEE Specification P1455, DSRC Applications for Intelligent Transportation Systems, except the frequencies in Israel will be 925 MHz and 928 MHz, instead of 915 MHz used in North America. The DSRC system will be active TDMA, as described in the two specifications listed above. The deployed DSRC will be under the authority of the Israel Ministry of Communications. Frequency approval has been granted for DSRC operations at 925 MHz and 928 MHz.

This experimental license is requested to allow operations at 915 MHz, using existing FCC Type-accepted equipment (described below) and with modified equipment operating at 925 MHz. Transmission at 928 MHz is NOT requested.

The DSRC system consists of Road-Side Equipment (often called a reader or a beacon) and On-Board Equipment (often called a transponder or a tag). The reader is an automatic vehicle identification device that transmits and receives radio frequency (RF) data to/from transponder equipped vehicles or assemblies. The reader works in conjunction with a host computer system to identify and log a passing transponder and then take actions such as reading the data stored on the transponder, writing a message to the transponder or signaling the driver via lights and/or buzzers built into the transponder. The communications zone between the reader and transponders is 8 to 30 meters in the direction of the antenna boresite. Antennas are pointed toward oncoming traffic, with an elevation angle of 10 to 80 degrees downward from horizontal. The Dedicated Short-Range Communications (DSRC) system is comprised of the following major components:

1. The Reader manufactured by Raytheon TMS, Fullerton California, consisting of: Transceiver, Part No VRC001-101 (FCC ID: MRQVRC001-101) with modifications to allow use at 915 MHz or 925 MHz, Host Computer, Enclosure, Heaters, DC Power Supply, interconnect wiring and protection devices.
2. Antennas of various types, including the Hirschmann E5910 or similar units that allow operation within the parameters listed in Block 4 and the two DSRC Specifications listed above.
3. Type II and/or Type III Transponder manufactured by Delphi Electronics, Kokomo, Indiana (Formerly Delco). The transponders have been submitted to the FCC for Type Acceptance for operation at 915 MHz. Some transponders will be modified to operate at 925 MHz, as part of the development work being performed

The development and testing program to support this work is scheduled for two years duration.

*Amendment***EXHIBIT 2**Road-side Equipment (RSE):*(revised)*

- A. 915 MHz
- B. Maximum RF output power at the transmitter terminals of +30.0 dBm
- C. Maximum effective radiated power from the antenna of +42.7 dBm. The maximum EIRP in and above the plane of the horizon is limited to +38.7 dBm by limiting the antenna height to 6 meters and using an elevation angle of - 85 degrees as measured from the horizon
- D. Peak power is stated in items B & C
- E. Emission designator is 3M60A1D
- F. Modulating Signal is 500 Kbaud maximum with a 1.0 microsecond pulse duration and a 2.0 microsecond repetition rate (Manchester encoding)
- G. Necessary Bandwidth is 3.6 MHz

- A. 925 MHz
- B. Maximum RF output power at the transmitter terminals of +30.0 dBm
- C. Maximum effective radiated power from the antenna of +42.7 dBm. The maximum EIRP in and above the plane of the horizon is limited to +38.7 dBm by limiting the antenna height to 6 meters and using an elevation angle of - 85 degrees as measured from the horizon
- D. Peak power is stated in items B & C
- E. Emission designator is 3M60A1D
- F. Modulating Signal is 500 Kbaud maximum with a 1.0 microsecond pulse duration and a 2.0 microsecond repetition rate (Manchester encoding)
- G. Necessary Bandwidth is 3.6 MHz

On-board Equipment (OBE):*(faq)*

- A. 915 MHz
- B. Maximum RF output power at the transmitter terminals of +0 dBm
- C. Maximum effective radiated power from the antenna of +0 dBm
- D. Peak power is stated in items B & C
- E. Emission designator is 3M60A1D
- F. Modulating Signal is 500 Kbaud maximum with a 1.0 microsecond pulse duration and a 2.0 microsecond repetition rate (Manchester encoding)
- G. Necessary Bandwidth is 3.6 MHz

- A. 925 MHz
- B. Maximum RF output power at the transmitter terminals of +0 dBm
- C. Maximum effective radiated power from the antenna of +0 dBm
- D. Peak power is stated in items B & C
- E. Emission designator is 3M60A1D
- F. Modulating Signal is 500 Kbaud maximum with a 1.0 microsecond pulse duration and a 2.0 microsecond repetition rate (Manchester encoding)
- G. Necessary Bandwidth is 3.6 MHz