## Notification of the Office of the National Broadcasting and Telecommunications Commission

## Re: Rule of License for Use of Radar System Radiocommunication Equipment used in Vehicles

Whereas the National Broadcasting and Telecommunications Commission's promotion and support policy for research and development of telecommunication technology, telecommunication industry and continuous industry can fulfill the citizen need on daily extensive use of radiocommunication equipment with new technology for benefit and safety to citizen bodies, lives and properties, it is expedient to ensure the public use of radar system radiocommunication equipment used in vehicles to detect the barriers or things in nearby area. This will be useful for the vehicle drivers in reduction of accidental loss both in life and property, support development and promote the competition of the auto industrial sector of the country, as well as support the development of Automated Vehicles for more conformity of Thailand requirements to international requirements.

By virtue of provisions under Section 27 (4) of Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services Act B.E. 2553 (2010), amended by Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services (No. 2) Act B.E. 2560 (2017), Section 27 (24) and Section 81 paragraph two of Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services (No. 2) Act B.E. 2560 (2017), Section 27 (24) and Section 81 paragraph two of Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services Act B.E. 2553 (2010) in accompany with Section 6 paragraph two, Section 11 paragraph four, and Section 29 of Radiocommunication Act B.E. 2498 (1955), amended by Radio Communications Act (No. 3) B.E. 2535 (1992), the National Broadcasting and Telecommunication Commission therefore promulgates the following notification.

Clause 1 This Notification shall come into force as from the day following the date of its publication in the Government Gazette.

Clause 2 The Notification of the Office of the National Broadcasting and Telecommunications Commission on License for Use of Radar system radiocommunication equipment used in vehicles dated 26 October 2014 shall be repealed.

Clause 3 Radar system radiocommunication equipment used in vehicles shall be determined as follows.

(1) 22.00 - 24.05 GHz
(2) 24.05 - 24.25 GHz
(3) 24-25 - 26.65 GHz

(4) 76 - 77 GHz

(5) 77 – 81 GHz

Clause 4 Radar system radiocommunication equipment used in vehicles must have transmitting power not more than the following determined value.

Radio frequency (GHz)	Transmitting power
22.00 - 24.05	Maximum radiated average power density : e.i.r.p. not more than -41.3 dBm/MHz
24.05 - 24.25	Maximum radiated peak power : e.i.r.p. not more than 100 mW or 20 dBm
24.25 - 26.65	Maximum radiated average power density : e.i.r.p. not more than -41.3 dBm/MHz
76 – 77	Peak power : e.i.r.p. not more than 55 dBm
77 - 81	Peak power : e.i.r.p not more than 55 dBm

Clause 5 Radar system radiocommunication equipment used in vehicles shall be exempted from license for possession, use and export of radiocommunication equipment, and establishment of radio communication station, but not exempted from license for making (manufacturing) and import of radiocommunication equipment.

Radar system radiocommunication equipment used in vehicles shall be exempted from license for trade of radiocommunication equipment unless in case of trade of radiocommunication equipment that the maker (manufacturer) or importer of radiocommunication equipment, license for trade of radiocommunication equipment must be granted.

Clause 6 Radar system radiocommunication equipment used in vehicles must have technical standards as determined by the NBTC, and inspected and certified for standards in accordance with the Notification of the National Broadcasting and Telecommunications Commission on Standard Inspection and Certification of Telecommunications Equipment and Device.

Clause 7 The right of interference protection is specified as follows.

(1) The right of interference protection is not granted in use of radar system radiocommunication equipment used in vehicles in the 22.00 - 24.05 GHz, 24.05 - 24.25 GHz, and 24.25 - 26.65 GHz band. If interference in intensity level occurs against the use of other radio frequency in any area, the user must immediately suspend the use of such radiocommunication equipment that causes interference in that area. However, the supplier with accountability on the said radiocommunication equipment must formulate the corrective measure of interference for the user of the radiocommunication equipment that causes interference.

Government Gazette

(2) The use of radar system radiocommunication equipment used in vehicles in the 76 - 77 GHz and 77 - 81 GHz band shall be the use of Radiolocation Service which is granted for right of interference protection as determined in Table for Determination of National Radio Frequency.

(3) The NBTC may consider the condition for use of radar system radiocommunication equipment used in vehicles in the future to prevent the interference on the use of frequency in other services.

Clause 8 The vehicles manufacturing company that install radar system radiocommunication equipment shall prepare warning in the instruction document. The suitable distance not causing electromagnetic wave hazards as the result from use of radar system radiocommunication equipment for uneasiness relief of the users and public.

Clause 9 The application on inspection and certification of telecommunications equipment and device and application on license for making (manufacturing) or importing radiocommunication equipment for domestic use in case of radar system radiocommunication equipment used in vehicles in the 22.00 - 24.05 GHz and 24.25 - 26.65 GHz band shall be executed as follows.

(1) Telecommunications equipment shall be applied for inspection and certification not later than 31 December 2019. In case of the 22.00 - 24.05 GHz band, the foreign laboratory testing result report issued by testing result report before 1 July 2013 shall be used only.

(2) The application on license for making or importing radiocommunication equipment for domestic use shall not later than 31 December 2023.

(3) In case where the applicant of license for making or importing under Clause (2) wishes to reserve radiocommunication equipment as replacement spare part, the application on license shall be submitted from 1 January 2024 onwards. However, the replacement spare part can be reserved not exceeding 10% of number of licensed radiocommunication equipment per design/model. Such maker or importer is responsible for reporting the information of number of such licensed radiocommunication equipment to the Office of the NBTC for acknowledgement within 31 January 2024.

(4) In case where it appears that the additional request of license for making or importing of radiocommunication equipment for domestic use is required for radiocommunication equipment in design/model which has already been made or imported for domestic use in complete number under (3), the NBTC may consider licensing for making or importing the radiocommunication equipment in such design/model for domestic use in specific case of additional reservation as replacement spare part as much as necessary and suitable only.

Promulgated on 28 December 2017

General Sukit Khamasunthorn

The Commissioner of the National Broadcasting and Telecommunication Commission

Act as the Chairman of the National Broadcasting and Telecommunication Commission

This translated version is prepared with the sole purpose of facilitating the comprehension of foreign participants in the telecommunication rules and regulations and shall not in any event or by any reason be construed or interpreted as having effect in substitution for supplementary to the Thai version thereof. If its translation to other languages is in contrary to Thai version, the latter shall prevail.

Please note that the translation has not been subjected to an official review by the Office of the National Broadcasting and Telecommunications Commission. The Office of NBTC, accordingly, shall not undertake any responsibility for its accuracy, nor be held liable for any loss or damages arising from or in connection with its use.

-----

-----