

SeaNet Maritime Communications AB
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UNOFFICIAL TRANSLATION

Application of SeaNet Maritime Communications AB

DECISION OF THE FINNISH COMMUNICATIONS REGULATORY AUTHORITY (FICORA) ON GRANTING A RADIO LICENCE FOR GSM 1800 BASE STATIONS ON BOARD VESSELS

1. APPLICATION AND PROCEDURE

SeaNet Maritime Communications AB has on 2 January 2007 applied for a radio licence for GSM service on board vessels using a stand-alone GSM ship network.

With a request to supplement the application, dated 27.6.2008, FICORA has asked the applicant to update and amend the application by 29 August 2008.

The applicant has requested an extension of the dead line. FICORA has granted a dead line of 5.9.2008. The applicant has amended the licence application on 10.9.2008.

An opportunity has been reserved for the applicant on 5 February, 2009 to comment on the draft decision by 5 March, 2009.

2. CONTENT OF THE APPLICATION AND GROUNDS

SeaNet Maritime Communications AB has applied for the following:

"Seanet closely follows the development in the CEPT WGRA on GSM OBV. We believe that we comply with the requirements set out both on emission from the ship, and also that we turn off emission via an automated system based on the ship's GPS position.

Seanet hence seeks a general permission to operate;

** Finnish and foreign ships on the Finnish territorial sea, complying with CEPT regulation as defined in GSM OBV*

** Finnish ships in the high seas*

** Finnish ships in foreign territorial sea, where Seanet is authorized to operate either by local regulation or by obtaining a license"*

3. HEARING

3.1. Finnish Maritime Administration

FICORA has heard the Finnish Maritime Administration, which e.g. stated:

"When on sea it is not acceptable to call the emergency number (112) from the vessel. To make sure that due measures are taken, all emergency calls on board the vessel must reach the navigation bridge and the ship's master, either through the staff or some of the internal alarm system of the ship. The ship's master is responsible for the ship, its crew and passengers/cargo and he has to be informed of everything on board. If external help is needed the ship's master may use the ship's GMDSS equipment for contacting the rescue authorities. Our suggestion is that when dialing 112 via the ship's own GSM base station or repeater the calls would automatically be transferred to the navigation bridge and the ship's own system for emergency calls.

According to international agreements all ships operate on different security levels, security level 1-3. Level 1 is used in normal conditions, and level 3 when security is seriously threatened. It would be important to be able to prevent the use of GSM phones at security threats, provided that the mobile phone in one way or another could be an essential part in a plan for harming the ship."

3.2. Finnish Consumer Agency (FCA)

FICORA has heard the Finnish Consumer Agency (FCA), which e.g. stated:

"FCA supports operations aiming at increasing the availability and functionality of GSM services on board vessels. The mobile operator subscription should not affect the consumer's position.

The request for comment states, that FICORA does not have a clear picture of the call charges. The consumers consider price an important part of the GSM service. Under the Consumer Protection Act and the decree on statement of prices issued by virtue of it the price of a service provided must be informed clearly and unambiguously and in a way which is easy for the consumer to notice and understand. Pursuant to section 67 of the Communications Market Act the communications services, an agreement must specify the pricing basis or applied tariffs of the services. Accordingly, the consumer has to be informed in a clear way also of pricing principles outside the Finnish borders."

3.3. Finnish Competition Authority

FICORA has heard the Finnish Competition Authority, which e.g. stated:

"The Finnish Competition Authority welcomes this arrangement which aims at offering consumers with GSM subscriptions new services and better possibilities to use GSM network services in those parts of the Finnish territorial waters which are outside GSM network coverage. With regard to effective competition the Finnish Competition Authority considers it important that there are no unnecessary entry barriers to the new market sector, e.g. no unreasonably difficult licensing procedure, but all players are granted access on reasonable and non-discriminatory conditions. In other respects the Finnish Competition Authority does not have any objections to the arrangement being planned, at this stage.

3.4. Finnish mobile operators

By 25 May 2007 FICORA has heard DNA Verkot Oy, Elisa Oyj and TeliaSonera Finland Oyj.

According to all the answers the present GSM coverage is fairly good. In recent years the coverage area has been improved e.g. by placing repeaters on board vessels.

Furthermore the respondents stated, for example, that the GSM system on vessels must not cause harmful interference to present GSM networks. Neither should GSM operation be allowed outside the structures of the vessel. The respondents also object to radio licences being granted to operators, who would operate in Finnish internal waters.

3.5. Finnish shipping companies

On 26 January 2007 Ficora sent an enquiry regarding potential use of ship networks in Finland to the shipping companies Tallink Silja, Finnlines, Rederiaktiebolaget Eck-erö, Viking Line and Birka Line.

The respondents desired a better GSM network coverage for the companies themselves and for passengers in Finnish territorial sea as well as in international waters.

According to the answers the areas in the middle of the Gulf of Finland on the Helsinki-Tallinn route, the open sea on the Helsinki-Mariehamn route and at Kihti (Turku archipelago) are the most critical points as far as the present GSM mobile network coverage is concerned. On the Helsinki-Travemünde route GSM cannot be used after passing Harmaja lighthouse.

Some of the shipping companies stated that they have Finnish or foreign GSM operators' mobile network base-station repeaters on board their vessels.

3.6. Hearing of the applicant

FICORA has heard the applicant and submitted the draft decision for comments on 5.2.2009. SeaNet Maritime Communications AB gave an answer on 25.2.2009 and stated that it accepts the decision and does not have any comments on the draft.

4. GROUNDS OF THE DECISION

4.1. Applicable legal provisions

By virtue of section 7 (1) of the Act on Radio Frequencies and Telecommunications Equipment (Radio Act, 1015/2001) FICORA grants in a radio licence the right to use frequencies, on application.

The purpose of the Radio Act is laid down in section 1. The provisions applicable to radio licence matters are included in section 1, points 1, 2 and 4. When considering applications, promoting efficient, appropriate and interference-free use of frequencies, a fair availability of radio frequencies and efficient communications market must be taken into account.

Under section 8 (1) of the Radio Act FICORA may attach conditions to a radio licence that are necessary for ensuring efficient and appropriate use of frequencies, efficiency in the communications market and preventing or removing interference in radiocommunications.

The provisions of section 10 of the Radio Act apply to granting a radio licence. If an application meets the requirements laid down in section 10 (4) a radio licence must be granted, i.e. 1) the licence or frequency reservation applied for pertains to a frequency band which, in the regulations on frequency usage issued by the Finnish Communications Regulatory Authority, has been allocated for the use referred to in the application; 2) it is possible to allocate technically appropriate radio frequencies within the frequency band for use or reservation by the applicant; 2 a) the radio transmitter's conformity has been confirmed; and 3) the Finnish Communications Regulatory Authority has no justifiable cause to suspect that the applicant will violate the provisions and regulations concerning radiocommunications or the radio licence conditions. Furthermore this is provided that no conditions laid down in subsections 5-6 prevent granting of a radio licence. Under sections 10 (5-6) of the Radio Act a radio licence may be denied if there is an unpaid sum concerning the applicant's previous radio licence or frequency reservation that pertains to the same type of equipment as the new licence or reservation being applied for, and the overdue amount is other than insignificant, or if the applicant aims to provide telecommunications requiring a licence as referred to in section 4 of the Communications Market Act or to pursue

television and radio broadcasting that requires a licence as referred to in section 7 of the Act on Television and Radio Operations, and the applicant does not have the necessary licence.

FICORA is of the opinion that the application meets the requirements laid down in section 10 (4) of the Radio Act for granting a radio licence. Neither are there any impediments referred to in section 10 (5) of the Radio Act for granting a radio licence.

By virtue of section 4 (1) of the Communications Market Act (393/2003) a licence is required to provide a network service that uses radio frequencies in a mobile network practicing public telecommunications. According to the Government Bill (HE 112/2002) related to this provision "the provision is in line with the current state and complies with the obligations imposed on member states in Article 9 of the Framework Directive and Article 5 of the Authorisation Directive. It is suggested that radio frequencies would only be regulated when necessary due to the insufficiency of frequencies. ... In the Government Bill public telecommunications means telecommunications with services to a set of users that is not subject to any prior restriction."

According to section 10 (6) of the Radio Act "no radio licence or frequency reservation can be granted unless the applicant has the necessary licence, if the applicant aims to practice telecommunications requiring a licence as referred to in section 4 of the Communications Market Act ...". Pursuant to section 4 of the Communications Market Act e.g. a network service using radio frequencies in a mobile network practicing public telecommunications requires a licence. According to the preparatory works (HE 112/2002) of the Communications Market Act FICORA's interpretation is that the GSM service for a limited user group, such as the vessel's passengers and crew, indicated in the application is not considered public telecommunications referred to in the Communications Market Act. Thus, FICORA's opinion is that SeaNet Maritime Communications AB does not need a licence referred to in section 4 of the Communications Market Act for GSM service on board vessels. FICORA also refers to the preparatory works of section 4 of the Communications Market Act according to which regulation of the use of radio frequencies is required, when it is necessary due to insufficiency of frequencies. In practice there will be enough ship network frequencies, and so it is not necessary to limit the amount of service providers with a licensing procedure. Therefore, there is no impediment referred to in section 10 (6) of the Radio Act for granting a radio licence, either.

Pursuant to section 5 of the Government Decree on the Use of the Allocation Table for the Frequency Bands used for Television and Radio Operation and for Telecommunications subject to Licence "The frequency bands 880–915 MHz and 925–960 MHz (900 MHz frequency range) and 1710–1785 MHz and 1805–1880 MHz (1800 MHz frequency range) are those to be used for second generation digital mobile communications (GSM). ... There are three national digital GSM mobile networks in the 900 MHz band as well as in the 1800 MHz band."

According to section 2 of the Radio Act the Act applies to radio equipment on board Finnish vessels and aircraft and in Finnish equipment sent into space, even when this equipment is not within Finnish territory.

First, SeaNet Maritime Communications AB has applied for a radio licence for GSM 1800 base stations to be situated on board Finnish and foreign vessels in Finnish territorial sea and also on board Finnish vessels on the high seas.

By virtue of the Radio Act and its section 2 FICORA may grant a radio licence for GSM 1800 base stations to be situated on board vessels in Finnish territorial sea and in addition on board Finnish registered vessels on the high seas, where the law of the vessel's flag state is applied as stipulated in Article 92 of the UN Convention on the Law of the Sea.

According to section 7 of FICORA Regulation 12 R/2009 M no radio licence referred to in section 7 of the Radio Act is required for the possession and use of GSM 1800 base stations situated on board vessels, referred to in the ECC (Electronic Communications Committee) decision ECC/DEC(08)08 operating within the frequency bands 1710-1785 and 1805-1880 MHz, if a competent authority of the country of registration of the vessel has authorized the use of them.

Therefore, foreign vessels do not need a radio licence for GSM 1800 base stations to be situated on board vessels in Finnish territorial sea in cases regulated by ECC decision ECC/DEC(08)08. The equipment is exempted from licensing, if a competent authority of the country of registration of the vessel has authorised the use of it. Based on the above FICORA states that SeaNet Maritime Communications AB need not apply for a radio licence as far as foreign vessels are concerned.

Second, SeaNet Maritime Communications AB has applied for a radio licence for GSM 1800 base stations to be situated on board Finnish vessels in the territorial sea of another state than Finland, too, when this is allowed in the related area. FICORA notes that it does not have the powers to grant the radio licence applied for in other than Finnish areas. In certain states international agreements such as the ECC decision ECC/DEC(08)08 may, however, enable this kind of use, when an authority of the country of registration of the vessel has authorised GSM 1800 base stations to be situated on board vessels. The radio licence that FICORA grants in this decision is an authorisation as referred to in ECC/DEC(08)08.

On the basis of the above, FICORA maintains that the applicant may be granted a radio licence for Finnish territorial sea and high seas when no exemption from licensing is provided by ECC decision ECC/DEC(08)08.

4.2. Validity period of the radio licence and immediate complying with decision

It is justified to grant the radio licence until 31.3.2010. In FICORA's opinion this date is reasonable considering the fact that the European Commission is preparing a decision on GSM 1800 base stations on board vessels.

By virtue of section 40 of the Radio Act an appeal may be made to the Administrative Court against a decision made by FICORA under this act, as provided in the Administrative Judicial Procedure Act (586/1996). In its decision, FICORA may order that the decision be complied with before it has gained legal force.

FICORA orders that this decision must be complied with regardless of appeals unless the Administrative Court orders otherwise.

5. DECISION

5.1. Radio licence decision

SeaNet Maritime Communications AB will be granted the right to use frequencies 1783.3 - 1784.9 MHz/1878.3 - 1879.9 MHz for GSM 1800 base station transmitters on board Finnish vessels in Finnish territorial sea and on the high seas.

The licence expires on 31 March 2010.

5.2. Licence conditions

SeaNet Maritime Communications AB has to inform FICORA in writing of the vessels registered in Finland with GSM 1800 base station transmitters referred to in this radio licence. FICORA must also be kept informed of any changes.

In Finnish territorial sea the System must comply with the conditions in ECC Decision ECC/DEC/(08)08.

- the System must not be used closer than 2 NM from the baseline¹;
- only indoor v-BS antenna(s) to be used between 2 and 12 NM from the baseline
- DTX² has to be activated on the System uplink;
- the timing advance³ value of v-BS must be set to minimum;
- all v-MS must be controlled to use the minimum output power (0 dBm in 1800 MHz bands);
- within 2-3 NM from the baseline the v-MS receiver sensitivity and disconnection threshold (ACCMIN⁴ & min. RXLEV⁵ level) must be ≥ -70 dBm/200 kHz;
- within 3-12 NM from the baseline the v-MS receiver sensitivity and disconnection threshold (ACCMIN & min. RXLEV level) must be ≥ -75 dBm/200 kHz;
- the v-BS emissions measured anywhere external to the vessel (i.e. at ship perimeter or on its open deck areas) must not exceed -80 dBm/200 kHz (assuming 0 dBi measurement antenna gain).

Any operation of the System on the high seas must comply with the following:

- the timing advance value of v-BS must be set to minimum;
- all v-MS must be controlled to use the output power of max. 5 dBm in 1800 MHz bands;
- the v-BS emissions measured at the distance of 100 m from the ship hull must not exceed -80 dBm/200 kHz (assuming a 0 dBi measurement antenna gain).

6. LEGAL PROVISIONS

Act of Radio Frequencies and Telecommunications equipment (Radio Act), sections 1, 2, 8, 10 and 40.

Communications Market Act, section 4

Government Decree on the Use of the Allocation Table for the Frequency Bands used for Television and Radio Operation and for Telecommunications subject to Licence (in Finnish), section 5

7. APPEAL

This decision can be appealed to the Helsinki Administrative Court as provided in the Administrative Judicial Procedure Act (586/1996). According to section 6 of the Act, any person to whom a decision is addressed or whose right, obligation or interest is directly affected by a decision may appeal against the decision. The appeal directions are attached to the decision.

8. FURTHER INFORMATION

At FICORA further information on this decision can be obtained from Petri Lehtikainen, Head of Radio Network Unit, Tel +358 9 6966 87 or Anna von Fieandt-Lehtonen, Legal Counsel, Tel. +358 9 6966 745. The e-mail address follows the format firstname.lastname@ficora.fi.

Director

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Petri Lehtikainen

ANNEX Direction of appeal

¹ Baseline and territorial sea, defined in the UN Convention on the Law of the Sea.

² DTX (discontinuous transmission, as described in GSM standard 3GPP TS 148.008).

³ Timing advance (as described in GSM standard 3GPP TS 144.018).

⁴ ACCMIN (RX_LEV_ACCESS_MIN, as described in GSM standard 3GPP TS 144.018).

⁵ RXLEV (RXLEV-FULL-SERVING-CELL, as described in GSM standard 3GPP TS 148.008).