

Mr. John Giusti
Chief of the International Bureau
Federal Communications Commission
445 12th Street SW
Washington, D.C. 20554

Dear Mr. Giusti:

The National Telecommunications and Information Administration (NTIA), on behalf of the Executive Branch agencies, has approved the release of an additional draft Executive Branch proposal for WRC-07. This proposal considers the federal agency inputs toward the development of U.S. Proposals for WRC-07.

The enclosed document contains a draft proposal, which addresses Agenda Item 7.2 and proposes to add an additional Agenda Item (2.XC) "Support Coastal Sea Surface Radar Operations" to the WRC-10 agenda. This proposal is forwarded for your consideration and review by your WRC-07 Advisory Committee. Jim Vorhies of my staff is the primary contact for NTIA.

Sincerely,

(Original Signed September 20, 2006)
Fredrick R. Wentland
Associate Administrator
Office of Spectrum Management

Enclosure

United States of America

DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item 7.2: to recommend to the Council items for inclusion in the agenda of the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, taking into account Resolution **802 (WRC-03)**;

Background Information: There is an increasing interest in the ability to accurately measure the currents and waves in coastal waters and to maintain awareness of ships for security purposes. Operational systems are currently limited in their ability to provide data meeting current accuracy and resolution requirements. As a result, the global oceanography community is planning for the implementation of coastal sea surface monitoring radar networks. The benefits to society for improved measurement of coastal currents and sea state include a better understanding of issues like coastal pollution, fisheries management, search and rescue, beach erosion, maritime navigation and sediment transport. Coastal radar measurements of the sea surface provide support to meteorological operations through the collection of sea state and dominant ocean wave data. In addition, HF coastal radar technology has applications in global maritime domain awareness by allowing the long range sensing of surface vessels. This will benefit the global safety and security of shipping and ports.

HF radar technology has been used on an experimental basis for more than 30 years to conduct measurements of coastal sea conditions. This experimental use has allowed the development of radar technology for such a purpose, and provided insight into the areas of the radio spectrum where coastal sea surface radar operation would be most suitable in terms of both compatibility with other users and effectiveness of the ocean measurements. The need for additional data to mitigate the effects of disasters including tsunamis, understand climate change, and ensure safe maritime travel has led to the consideration of operational use of coastal sea surface monitoring radar networks on a global basis.

The change from experimental status to an operational network supporting maritime safety and security, disaster management, meteorological and oceanographic operations creates the need for radiolocation allocations in which the systems can operate.

The fact that a number of these radars have operated on an experimental basis for more than 30 years is an indicator that radiolocation allocations for such an application may have little or no effect on incumbent users of the bands in 3 to 30 MHz range. Operators of the experimental radars have even studied ways to make the most efficient use of the spectrum by timing operations of a number of radars in a geographic area, using GPS signals, so that many radars can share a single frequency. The work ongoing within Working Party 8B directly supports the objectives of this proposed agenda item, making it possible for all necessary studies to be complete in time for the 2010 World Radiocommunication Conference.

Proposal:

USA/ / 1 MOD

RESOLUTION 803 (WRC-~~03~~07)

~~Preliminary~~ Agenda for the 2010 World Radiocommunication Conference

The World Radiocommunication Conference (Geneva, 200~~3~~7),

USA/ /2 ADD

2.XC to consider the creation of radiolocation allocations in the frequency range 3 to 30 MHz, taking into account the results of ITU-R studies and recognizing the need to protect existing systems in the band, in accordance with Resolution **SCSS (WRC-07)**.

Reasons: Allocating sufficient radiolocation spectrum, on a primary basis, will provide adequate spectrum in which to conduct coastal sea surface radar operations on a global, operational basis.

USA/ /3 ADD

RESOLUTION SCSS (WRC-07)

Allocation of Radiolocation Spectrum in the Range 3 to 30 MHz to Support Coastal Sea Surface Radar Operations

The World Radiocommunication Conference (Geneva, 2007),

considering

- a) that there is increasing interest, on a global basis, in the operation of coastal sea surface radars for measurement of coastal sea surface conditions to support environmental, oceanographic, meteorological, climatological, maritime and disaster mitigation operations;
- b) that HF coastal radar technology has applications in global maritime domain awareness by allowing the long range sensing of surface vessels. This will benefit the global safety and security of shipping and ports;
- c) that operation of coastal sea surface radars provides benefits to society through environmental protection, public health protection, improved meteorological operations, increased coastal and maritime safety, and enhancement of national economies;

d) that coastal sea surface radars have been operated on an experimental basis around the world, providing an understanding of spectrum needs and spectrum sharing considerations as well as an understanding of the benefits these systems provide;

e) that for global use of sea surface radar systems on an operational basis, there is a need for several segments of spectrum allocated to the radiolocation service in the 3 to 30 MHz range;

f) that between 3 and 30 MHz, no radiolocation allocations exist that are usable for global sea surface radar operations;

g) that performance and data requirements dictate the regions of spectrum that can be used by sea surface radar systems,

recognizing

1) that coastal sea surface radars have been operated on an experimental basis with few compatibility problems with existing allocated services;

2) that developers of the experimental systems have implemented techniques to make the most efficient use of the spectrum;

3) that ITU-R Working Party 8B has approved a Question on the study of the most appropriate frequency bands for operation of coastal sea surface radars considering both radar system requirements and the protection of existing services,

resolves

1) to invite the ITU-R to conduct sharing analyses between the radiolocation service and incumbent services in the bands suitable for operation of coastal sea surface radar systems;

2) to recommend that WRC-10 review the results of the studies under *resolves* 1 and consider the creation of radiolocation allocations in frequency ranges suitable for operation of coastal sea surface radars and where sharing studies show little or no impact to existing services,

invites administrations

to contribute to the sharing studies between the radiolocation service and possibly affected incumbent services,

invites the ITU-R

to complete the necessary studies, as a matter of urgency, prior to WRC-10,

instructs the Secretary-General

to bring this Resolution to the attention of the International Maritime Organization (IMO), World Meteorological Organization (WMO), and other international and regional organizations concerned.

Reasons: Provide guidance for the required studies and invites administration participation.
