



MEMORANDUM

To: Omer Bashir, Intelsat
From: Ken Ryan, Skjei Telecom, Inc.
Subject: ESV Interference Analysis
Date: June 16, 2005

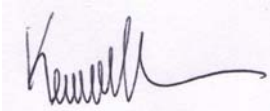
On behalf of Intelsat, Skjei Telecom has performed interference analyses for three Earth Station on Vessels routes and ports operating in the 5925-6425 MHz band. The three areas analyzed were Norfolk, VA, Everett, WA; Long Beach, CA. The analysis considered an operational area of 200 km from the shore and extending at least 200 km inland. The intention of the analysis was to determine the spectrum that could be used by the ESV transmitters which would preclude interference into coordinated and licensed 6 GHz terrestrial systems.

The analysis methodology consisted of determining the ESV operational parameters, including communication satellite(s) of interest, antenna pattern, transmit power, and antenna centerline. The ESV route was then determined using the deep-sea approach lanes and using information provided by Intelsat and their intended ESV end-user. An interference analysis using the Critical Contour Point method was performed using the lower 6 GHz terrestrial database and analysis tools provided by Comsearch. The details of the ESV parameters for each location are included in the Interference Analysis reports.

The analysis results indicate that the only spectrum common to all three areas which was not being used by existing or coordinated terrestrial systems were at the band edges. The band segments between 5925-5930 MHz and 6420-6425 MHz are not occupied by terrestrial systems using standard frequency plan assignments used for wideband (30 MHz) systems. A small number of narrowband systems have frequency plans which directly overlay on these band edges. Figures 1 and 2 attached show all of the terrestrial microwave links which use channels which fall within the spectrum at the two band edges. The zone highlighted extends 200 km out from the coast and 200 km inland from the coast.

The ESVs proposed should not cause unacceptable interference into terrestrial facilities when considering their operational parameters to include the limited spectrum, the ESV's route and port location, and the specific satellite(s) being used as shown in the interference analysis reports.

Signed:

A handwritten signature in dark ink, appearing to read "Kenneth", followed by a long, horizontal, slightly wavy line.

Kenneth G. Ryan, P.E.
Vice President
Skjei Telecom, Inc.

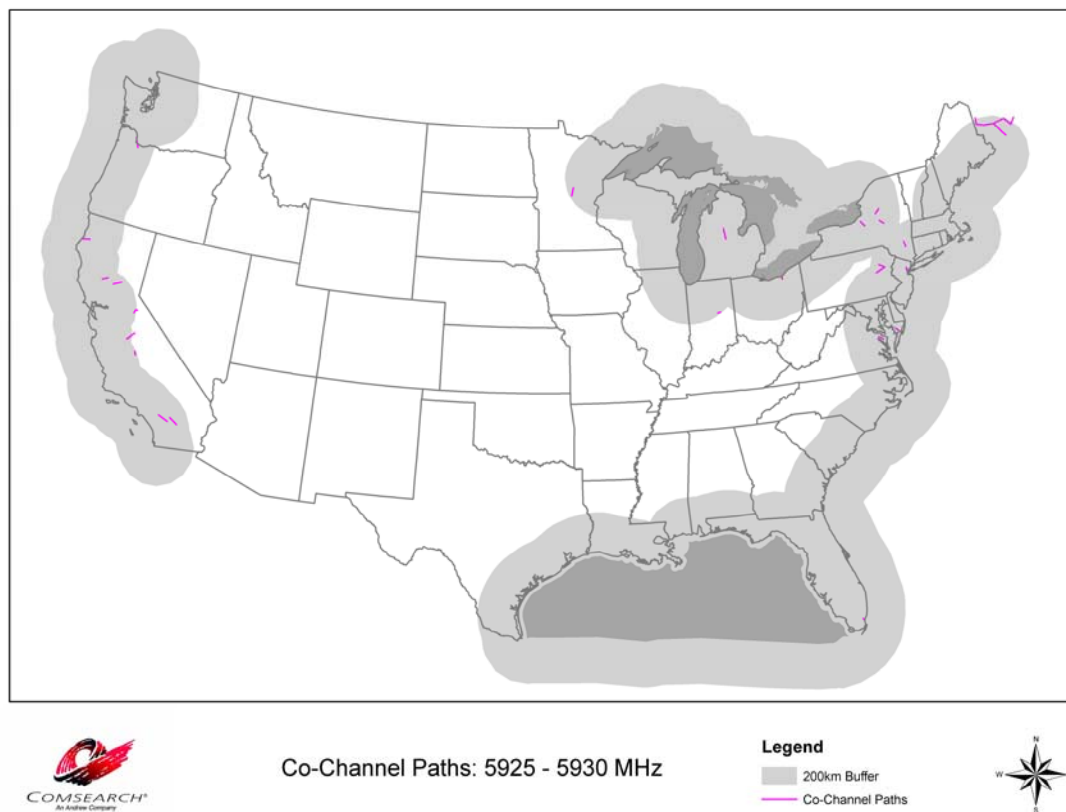


Figure 1 – Terrestrial Microwave Links with channels overlapping 5925-5930.0 MHz

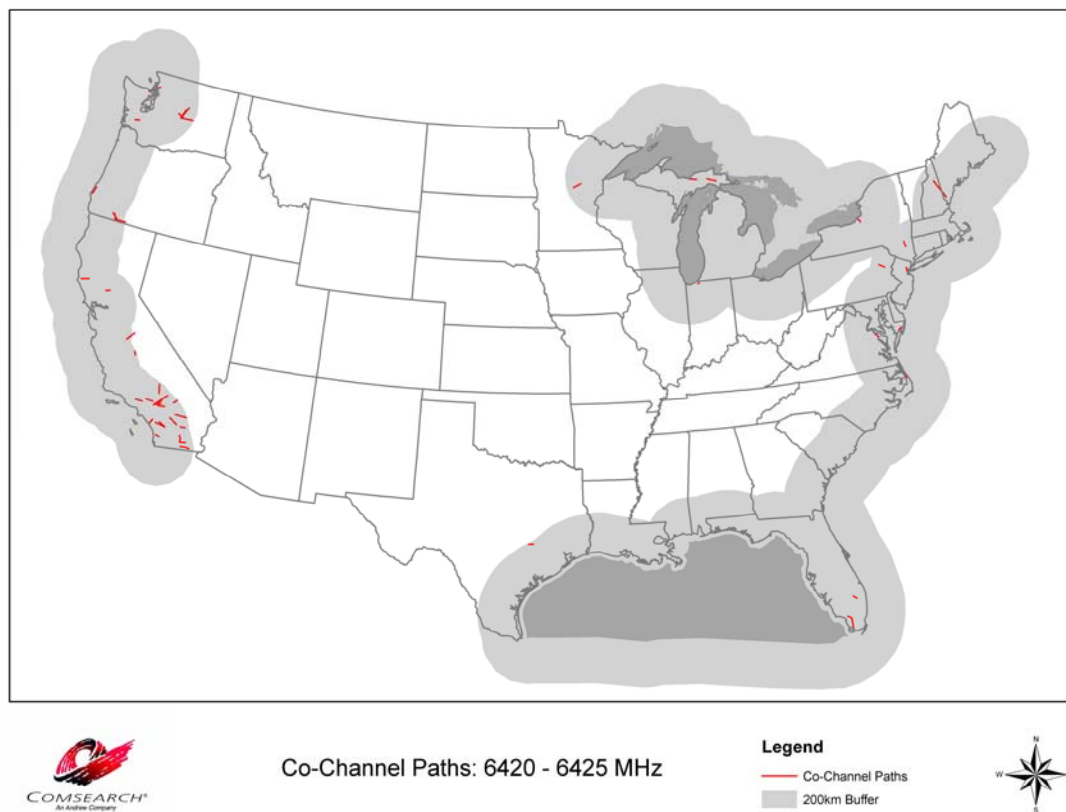


Figure 2 – Terrestrial Microwave Links with channels overlapping 6420.0-6425. MHz