



## **Developments on the analysis and modeling of the usage of the HF Spectrum within COST 296**

H. Haralambous (1) and L. Economou (2)

(1) Frederick University, Nicosia, Cyprus (eng.hh@fit.ac.cy), (2) Intercollege, Limassol, Cyprus (leconomou@lim.intercollege.ac.cy)

This paper deals with research done on the analysis and modeling of HF spectrum usage in the frames of the working package on HF spectrum management during COST 296 “Mitigation of Ionospheric Effects on Radio Systems”. The models presented are based on measurements obtained during a long-term joint UK–Swedish–German project on the measurement and analysis of HF spectral occupancy over northern Europe. In this COST action the research effort focused into the possible application of artificial neural networks to predict spectral occupancy in the HF spectrum (1.6-30MHz).