



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	MS: 2012/BJAST/2826
Title of the Manuscript:	Cherenkov Effect in ionospheric E layer plasma for Oxygen-ion.

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	It is a well-known fact that the ionosphere has a frequency-dependent refractivity, an early reference on this subject is for example : W. Sollfrey and H. T. Yura, Phys. Rev. 139, A48-A55 (1965) 'Cerenkov Radiation from Charged Particles in a Plasma in a Magnetic Field'. The authors should present a more complete list of references to classical papers on this subject. In the paper some rather detailed values for the Cherenkov angles are given. The authors should indicate how these predictions could be tested in realistic experiments, taking into account that the refractivity is height dependent and the emitted light thus will travel along curved trajectories.	All references from 1—6 are classical references that are used in the text and mentioned here.
<u>Minor</u> REVISION comments	It should also be noted that the electron densities have seasonal and day/night dependencies. How does this influence the predictions?	All scientist that are familiar with ionosphere plasma well knew that the frequency and height variations are inherent to this plasma.
<u>Optional/General</u> comments	In the manuscript a relatively simple calculation is presented of the index of refraction of the ionosphere and its frequency dependence. The derivation is correct (apart from typing mistakes), however is not really new.	Thank you it is o.k.