



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_13115
Title of the Manuscript:	Sum Rate Maximization Based on Joint Power Control and Beamforming in MIMO One Way AF Relay Networks
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: 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)
Compulsory REVISION comments	1) Subscripts are confusing and misleading in equation derivations. Derivations to eq. 12 and 13 are required to be clarified. 2) Line 238 and 239, denominator and numerator are mixed up. 3) Line 242 and 243, TL method is called algorithm 1, but in the fig. 2 it is algorithm 2. 4) The algorithm computational complexity is analysed based on one condition in 3.1. This analysis is not convincing since the result may change with any parameter changes. 5) In 3.2, author mentioned that, the sum rate gain is different from the same amount of additional relays, but have not clarified the root cause. The extra interference introduced by additional relays should be quantified. 6) Extensive English editing is required.	1. You are right. We corrected columns 180 and 111. Other subscripts are correct. 2. You are right we corrected them. 3. This mistake is corrected. 4. Note that the three matrixes in three algorithm (($\mathbf{Q}_k + \mathbf{D}_k$), $\mathbf{R}_h^k$ and ($\mathbf{R}_h^k - (\mathbf{Q}_k + \mathbf{D}_k)$)) always have same size ($\mathbf{R} \times \mathbf{R}$). So, they have same complexity. Alg. 3 always is the fastest. 5. It is due to this fact that the main goal of beam forming is creating vectors with same phases (coherent vectors) at receiver. Since the relays' powers are limited, increasing the number of vectors will increase the sum rate. Moreover, by comparing cases containing 10 and 20 relays with each other, we find that although the number of vectors increases, the length of each vector decreases. While the number of relays increases, we tend close to a saturation case because relay's power is fixed and the total length of the vectors cannot be more than a certain amount, 6. Whole of the paper is reviewed again for probable English errors.
Minor REVISION comments		
Optional/General comments		