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#### **SDI Review Form 1.6**

Journal Name:	Advances in Research
Manuscript Number:	Ms_AIR_30205
Title of the Manuscript:	Development of Multi-Functional Control Architecture for Multisensor Surveillance Systems
Type of the Article	

### General guideline for Peer Review process:

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

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# PART 1: Review Comments

	Reviewer's comment	<b>Author's comment</b> (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		
Minor REVISION comments	Multisensor approach is often utilized in modern surveillance systems because of its abilities to provide complementary and overlapping coverage on targets. In order to generate target tracks and estimates, the sensor data need to be fused. While a centralized and hierarchical processing approach is theoretically optimal, there are significant advantages in decentralizing the fusion operations over multiple processing nodes. This paper discusses decentralized and heterarchical control architectures, whereby each node processes the data from its own set of sensors and communicates with other nodes to improve on fusionsand estimates. A decentralized multisensor data fusion and estimation algorithm with nonlinear information filter were developed for each sensor node for effective information gathering, filtering and estimation along the desired trajectory. The dynamic systems were mathematically modelled and simulated. The simulation results show that the developed architecture satisfies stochastic stability criteria, manifests excellent tracking and filtering properties than the convectional architecture. The paper is well organized and its presentation is basically acceptable. The obtained results are also interesting. In my opinion, this paper contains	
	publishable results. The following are some comments	

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	that the authors might like to take into account when revising the paper: The motivation on the study should be further	
	results in this paper over some existing ones should be clearly demonstrated.	
	* Some more remarks after the development of the main results would be helpful.	
	* How the new algorithm developed in the appear compared with other existing ones?	
	*There are some editing and English errors in the paper, and the	
	authors should carefully check and correct them in the revision.	
Optional/General comments		

### **Reviewer Details:**

Name:	Grienggrai Rajchakit
Department, University & Country	Department of Mathematics, Maejo University, Thailand