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1.	Authors:	Nidhi Singh, Ajay Kumar, Chandra Prakesh Sahu	
	Paper Title:	Simulation Based Performance Analysis of AODV OLSR and ZRP Routing Protocols in MANET	
	<p>Abstract: Mobile Adhoc Network (MANET) is the collection of independent mobile nodes that can communicate to each other via radio waves. The mobile nodes that are in radio range of each other can directly communicate, whereas others need the aid of intermediate nodes to route their packets. These networks are fully distributed and can work at any place without the help of any infrastructure. This property makes these networks highly exile and robust. There are many protocols which are proposed on the issues of MANET but they have not considered all possibility of routing in intra as well as inter zone. The main motto of the research is upgrading the existing ZRP Model with enhancement of namely MDVZRP, SBZRP, and QCS to achieve better performance. The design goals of ZRP enhancement are to enhance the performance in the area such as quick route reconfiguration, route acquisition delay, and low mobility scenarios considering the all possible way of routing in inter as well as intra zone.</p> <p>Keywords: Routing, MANET, AODV, OLSR, ZRP, MID</p> <p>References:</p> <ol style="list-style-type: none"> 1. C.Sivaram murthy, B.S.Manoj, Adhoc wireless networks: Architectures, and protocols, Pearson Education, 2004. 2. Ashish K. Maurya, Dinesh Singh , “ Simulation based Performance Comparison of AODV, FSR and ZRP Routing Protocols in MANET”, International Journal of Computer Applications (0975 – 8887) Volume12– No.2, November 2010 3. Charles E. Perkins, Elizabeth M. Belding-Royer, S. Das, “AdHoc on Demand Distance Vector (AODV) routing, Mobile Ad Hoc Networking Working Group” July 2003, Internet-Draft 4. Prem Chand and MK Soni “Performance Comparison of AODV and DSR on-Demand Routing Protocols for Mobile Ad-Hoc Networks” International Journal of Computer Applications ISSN 0975 – 8887 Volume 49– No.18, July 2012. 5. Rutvij H. Jhaveri, Sankita J. Patel and Devesh C. Jinwala “DoS Attacks in Mobile Ad-hoc Networks: A Survey” 2012 Second International Conference on Advanced Computing & Communication Technologies. 6. Harmandeep Singh, Gurpreet Singh and Manpreet Singh “Performance Evaluation of Mobile Ad Hoc Network Routing Protocols under Black Hole Attack” International Journal of Computer Applications ISSN 0975 – 8887 Volume 42– No.18, March 2012. 7. Ashok M.Kanthe, Dina Simunic and Ramjee Prasad “Comparison of AODV and DSR On-Demand Routing Protocols in Mobile Ad hoc Networks” Emerging technology Trends in Electronics, communication and networking, © IEEE 2012 First international Conference ISBN 978-1-4673-1628-6. 8. Vinay P.Virada “Securing And Preventing Aodv Routing Protocol From Black Hole Attack Using Counter Algorithm” International Journal of Engineering Research & Technology (IJERT) Vol. 1 Issue 8, October - 2012 ISSN: 2278-0181. 9. Ashish Bagwari, Raman Jee,Pankaj Joshi and Sourabh Bisht “ Performance of AODV Routing Protocol with increasing the MANET Nodes and it's effects on QoS of Mobile Ad hoc Networks ” 2012 International Conference on Communication Systems and Network Technologies 978-0-7695-4692-6/12 © 2012 IEEE. 10. Naveen Bilandi, Harsh K Verma “Comparative Analysis of Reactive, Proactive and Hybrid Routing Protocols in MANET” International Journal of Electronics and Computer Science Engineering 1660 ISSN- 2277-1956. 11. Irshad Ullah and Shoaib Ur Rehman “Analysis of Black Hole Attack on MANETs Using Different MANET Routing Protocols” Master Thesis Electrical Engineering June, 2010 Thesis no: MEE 10:62. 12. Himani Yadav and Rakesh Kumar “Identification and Removal of Black Hole Attack for Secure Communication in MANETs” International Journal of Computer Science and Telecommunications [Volume 3, Issue 9, September 2012] ISSN 2047-3338”. 13. Shaily Mittal and Prabhjot Kaur “PERFORMANCE COMPARISION OF AODV, DSR and ZRP ROUTING PROTOCOLS IN MANET’S” International Conference on Advances in Computing, Control, and Telecommunication Technologies 978-0-7695-3915-7/09 © 2009 IEEE. 14. Arti Sharma and Satendra Jain”A Behavioral Study of AODV with and without Blackhole Attack in MANET” International Journal of Modern Engineering Research (IJMER) Vol.1, Issue.2, pp-391-395 ISSN: 2249-6645. 15. Idris Skloul Ibrahim, A.Etorban and Peter J.B King, Multipath Distance Vector Zone Routing Protocol for Mobile Ad-Hoc Networks MDVZRP, PGnet, John Moores University, PP. 171-176, July 2008. 16. Prince Samar, Marc R. Pearlman and Zygmunt J. Haas,Independent Zone Routing:An Adeptive Hybrid Routing Framwork Vol 12 No 4 Aug 2004. 17. Panagiotis Papadimitratos, Zygmunt J. Haas, Secure data communication in mobile ad hoc networks”. IEEE Journal on Selected Areas in Communications Vol. 24, No. 2, PP. 343-356, 2006 18. Panagiotis Papadimitratos, Zygmunt J. Haas, Emin Gn Sirer, Path set selection in mobile ad hoc networks”, Proc. of the 3rd ACM international symposium on Mobile ad hoc networking computing MobiHoc, PP.1-11,2002 19. K. Sanzgiri, B. Dahill, B. N. Levine, C. Shields, and E. Belding- Royer.”A Secure Routing Protocol for Ad Hoc Networks.” In Proc. IEEE International Conference on Network Protocols, PP.78-87, 2002 20. K. Sanzgiri, B. Dahill, B. N. Levine, C. Shields, and E. Belding- Royer” Authenticated routing for ad hoc networks,” IEEE J. Select. AreasCommun., Vol. 2, No. 1, March 2005. 21. Moitreyee Dasgupta, S. Choudhury and N. Chaki,” Routing Misbehavior in Ad Hoc Network”, International Journal of Computer Applications, Vol.1, No. 18. 22. Kavita Taneja and R.B.Patel,” Mobile Ad hoc Networks: Challenges and Future”, Proceedings National Conference on Challenges and Opportu- nities in Information Technology, RIMTIET, Mandi Gobindgarh, PP.133-135, March 3, 2007. 		1-4
2.	Authors:	Jeong-Ho Yoo, Pil-Seok Ko, Sam-Dong Kim	
	Paper Title:	V-Band Balanced Amplifiers using Monolithic Uniplanar Tandem Couplers	
	<p>Abstract: V-band balanced amplifiers were monolithically fabricated using the uniplanar tandem couplers and 100-nm GaAs pseudomorphic high electron mobility transistors. Due to the excellent low-loss broadband coupling and high directivity of the tandem couplers, the balanced amplifier showed a very low input return-loss of -44 dB at 60 GHz which is known to be the best performance among the monolithic microwave integrated circuit V-band amplifiers reported to date. Compared to those of the reference single-ended amplifiers, the balanced amplifiers also exhibited comparable high S21 gains of 8-14 dB in a frequency range of 55-65 GHz.</p> <p>Keywords: V-band, balanced amplifiers, tandem couplers, coplanar waveguide, return-loss.</p>		5-7

	References: <ol style="list-style-type: none"> 1. K. Inoue, K. Ebihara, H. Haematsu, T. Igarashi, H. Takahashi, and J. Fukaya, IEEE MTT-S Dig., 1719 (2000). 2. B. Gilbert, The Micromixer, IEEE J. Solid-State Circuits 32, 1412 (1997). 3. R. H. Derksen, V. Luck, and H.-M. Rein, IEEE Trans. Microw. Theory Tech. 39, 1759 (1991). 4. Steve C. Cripps, RF Power Amplifiers for Wireless Communication, 2nd edn. (Artech House, Boston, 2006) pp. 380-386. 5. R. N. Simons, Coplanar Waveguide Circuits, Components, and Systems, (John Wiley & Son, New York, 2001), p. 347. 6. S. L. March, IEEE MTT-S Dig., 410 (1982). 7. S.-W. Moon., and S.-D. Kim, IEEE Microwave Wireless Compon. Lett. 16, 149 (2006). 8. T.-S. Kang, S.-D. Lee, B.-H. Lee, S.-D. Kim, H.-C. Park, H.-M. Park, and J.-K. Rhee, J. Korean Phys. Soc. 41, 533 (2002). 9. H.-C. Chiu, and B.-Y. Ke, Proc. 4th International High Speed Intelligent Communication Forum (Nanjing, 2012), pp. 1-4. 10. P.-Y. Ke, F.-H. Huang, and H.-C. Chiu, Progress In Electromagnetics Research C 31, 41 (2012). 	
3.	Authors: Patrick J. O'Brien, David Di Perna	
	Paper Title: Public Private Partnerships and Schedule Risk Management: a Case Study of Akron	
	<p>Abstract: Collaboration between private entities supplying capital for public projects presents unique challenges and risks for the contracting entities. In Ohio, universities can select developers to design and build facilities using a privately selected CM at Risk on their behalf but the developer is required to retain elements of public construction practices in their project execution, most notably, the CM at Risk must procure their subcontractors via the traditional public bidding process. On a project with a very challenging schedule, the Thomarios Construction Group, as Signet UA Development, LLC's CM at Risk, building a 158,800 SF, six story 531 room residence hall, instituted a series of innovative schedule management practices as part of the prebid preparation, validated subcontractor acceptance of the proposed practices during the procurement phase, and successfully executed the project implementing the risk management tools established as part of their planning processes to overcome a series of unforeseen conditions.</p> <p>Keywords: PPP, risk management, construction management, schedule management, preconstruction, cost management, transparency.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Appelbaum, J.R., Currie, M. & Welin, P. (2009). Ohio Construction Law Manual (Baldwin's Ohio Practice). Thomson West: New York, NY. 2. Devitt, C. (2010). Cuyahoga sets medical mart deal. The Bond Buyer, 374(33422). (24 November, 2010). 3. Doloi, H. (2012). Understanding the impacts of time and cost related to construction risks on operational performance of PPP projects. International Journal of Strategic Property Management, 16(3), 316-337. 4. Johnston, L. Medical mart contracts posted online by Cuyahoga County lack prices. Cleveland Plain Dealer. (17 February, 2012). 5. Ke, Y., Wang, S. & Chen, A.P.C. (2011). Risk management practices in China's public-private partnership projects. Journal of Construction Engineering and Management, 18(5), 675-684. 6. Landow, P. & Ebdon, C. (2012). Public private partnerships, public authorities, and democratic governance. Public Performance and Management Review, 35(4), 727-754. 7. Marques, R.C. & Berg, S. (2011). Public-private partnership contracts: a tale of two cities with different contractual arrangements. Public Administration, 89(4), 1585-1603. 8. Mills, Jr, E.A.S. & Gorham, A.E. (2002). Passing the Buck: Legal Limitations on Transferring Construction Risks. American Bar Association Forum on Construction Industry. (24 January, 2002). 9. Report of the Ohio Construction Reform Panel, 2009. http://www.osfc.ohio.gov/LinkClick.aspx?fileticket=KlsKB1q4KFQ%3D&tabid=79. (18 August, 2013). 	8-11