H2020 Marie Curie RISE – REMESH (823759)

H2020 Marie Curie RISE Project: REMESH – <u>R</u>esearch Network on <u>EM</u>ergency R<u>E</u>sources <u>S</u>upply C<u>H</u>ain

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REMESH newsletter – September 2022

Management

- 1. The kick-start meeting and workshop for REMESH took place at LJMU on 15-17 July 2019. Each partner attended this event. Feedback comments were given to the consortium from the EU project advisor, Simona Losmanova.
- 2. REMESH Project meeting University of Bonn, Mahidol University and project coordinator Dr Jun Ren on 12 December 2019.
- 3. LUND Planning meetings between LUSE and MU in Lund, September 2019.
- 4. Dr Jun Ren produced Project Data Management report to REMESH project portal, 31 October 2019.
- 5. Professor Dong-Ling Xu from UNIMAN produced/revising Project report "Risk Based Decision Making (Stage 1)" to REMESH project portal, October 2019.
- 6. Professor Andreas Norrman from LUSE visited Vietnam National University, Hanoi and planned exchange with Professor Nguyen Ha Nam and his colleagues, 3 January 2020
- 7. UNIMAN: Prof. Xu and Prof. Yang visited MU discussing on research progress and plans, Jan. 2020
- 8. Project coordinator Dr Jun Ren visited UGR on 29-30 January 2020.
- 9. Telephone meeting between project advisor Ms Simona Losmanova and Dr Jun Ren on 04/02/2020.
- 10. Project coordinator Dr Jun Ren visited DCU on 12-13 Feb 2020.
- 11. Regular communications within REMESH community regarding COVID-19 pandemic.
- 12. Dr Jun Ren produced Project annual report to REMESH project portal, 30 April 2020.
- 13. The first REMESH workshop scheduled on 23/05/2020 Wuhan was postponed due to COVID-19 pandemic.
- 14. Dr Jun Ren produced REMESH framework report to REMESH project portal, 30 June 2020.
- 15. Discussing Mid-term meeting issues between project advisor Ms Simona Losmanova and Dr Jun Ren on 16/07/2020.
- 16. The first REMESH workshop took place via ZOOM on 09 September 2020. Project management issues have been discussed after the workshop.
- 17. Discussions about project Mid-term meeting preparations among project coordinator Dr Jun Ren and consortiums on 16/09/2020.
- The Mid-term meeting for REMESH took place on 05-06 October 2020 vis Skype. Project coordinator Dr Jun Ren chaired the meeting. All partners attended this event. Comments were given to the consortiums from the EU project advisor, Simona Losmanova.
- 19. Beneficiary UBO withdrew from the project due to unforeseen circumstances from 28/04/2021.
- 20. Ms Simona Losmanova left the REMESH project on 28/06/2021, Mr Petros Gkotsis was appointed as the new REMESH project adviser.
- 21. Due to COVID-19 the REMESH project has been suspended between 01/10/2021 to 01/06/2022.
- 22. Mr Petros Gkotsis left the REMESH project on 28/01/2022, Ms Sandra Pinto Marques was appointed as the new REMESH project adviser.
- 23. REMESH resume meeting took place online on 26 May 2022. All partners attended this event.
- 24. UNIMAN and MU is jointly organising an online workshop to be held in Dec. 2022.



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- 25. WUT, UGR and LJMU are working closely to held ICTIS 2023 at Xian China and Granada Spain.
- 26. Project coordinator Dr Jun Ren visited Mahidol University in September 2022.

Exchange

- 1. LJMU –LJMU has a secondment at MU for 0.7 month, starting June 2019.
- 2. UNIMAN: Two staff members from MU visited UNIMAN for 2 days in July 2019; Two staff members visited WUT for from 17th July to 9th Aug. During the period, they participate in the preparation of two joint research grant applications. One staff members visited China from 13th July to 9th Aug.
- 3. WUT –WUT has a secondment at LJMU for 1.23 month, starting July 2019 (Xin-ping Yan 0.2, Di Zhang 0.2, Cheng-peng Wan 0.43, Kun Yang 0.2, Ting-ting Cheng 0.2).
- 4. WUT –UNIMAN has a secondment at WUT for 0.2 month, starting July 2019 (Dong-ling Xu 0.1, Jian-bo Yang 0.1).
- 5. WUT-WUT has a secondment at LJMU for 2 month, starting October 2019.
- 6. WUT- One researcher (Mr. Manuel Ríos de Haro) from UGR spent 1.22 months at WUT from November 2019.
- 7. LUSE has a secondment at MU for 3.0 months, starting October 2019.
- 8. LUSE has a secondment at MU for 0,5 months in October 2019.
- 9. UGR-A staff member from UGR visited WUT in November 2019 for 1.2 months.
- 10. LJMU Dr. Thanh visited VNU on Dec 2019.
- 11. LUSE Prof. Andreas Norrman visited VNU on Jan 2nd, 2020.
- 12. LUSE has a secondment at MU for 0,25 months in January 2020.
- 13. LUSE has a secondment at MU for 2 months in January 2020.
- 14. UNIMAN Two staff members from UNIMAN visited MU in January 2020 from the 3rd to the 9th for 7 days.
- 15. WUT WUT has secondment at LJMU for 6 months (2019.11.06 -2020.05.05)(Shuwu Wang);
- 16. WUT has a secondment at UNIMAN for 6 months (2020.02.12-2020.8.13) (Ji Quan).
- 17. LJMU has a secondment at WUT for 1 months (2020.10.9-2020.11.9) (Tian-Ran Ren).
- 18. UNIMAN send two ESRs, Miss Xiyi Chen and Miss Mengmeng Tan, to MU for two months (1 Sept.2022-31 Oct. 2022), and NUV for one month (1 Nov – 30 Nov. 2022)
- 19. An ESR from MU will visit UNIMAN.
- 20. Application of an ESR from WUT to visit UNIMAN is in processing.

Conferences/workshops and other information related to REMESH

- 1. ICTIS2019, Liverpool, UK. Prof. Xinping Yan from WUT and Professor Jin Wang from LJMU organised the 5th International Conference on Transportation Information and Safety, 14-17 July 2019. http://ictis.whut.edu.cn/.
- 2. Professor Dong-Ling Xu from UNIMAN attended the 4th International Symposium on Evidential Reasoning and Artificial Intelligence in Kunming, China, July 2019.
- 3. Ahlqvist, V.; Norrman, A. (2019): Exploring Supply Chain Risk Governance, 19th International Supply Chain Risk Management (ISCRiM) seminar, 2-3 Sep 2019, Copenhagen, Denmark.
- 4. Lucas Correa Dresch is contacting different humanitarian organizations (Doctors without borders, Caritas, Red Cross and UN) to discuss latest developments on cooling technologies and main ERSC management approaches employed during emergency situations.
- 5. UBO Literature study about cooling technologies and rapid monitoring technologies to be applied on ERSC.
- 6. UGR 8th International Business Servitization Conference, San Sebastian (Spain) (2019), Prof. Daniel Arias Aranda and Luis Miguel Molina Fernández from UGR and Prof. Vladimir Stantchev from SRH University of Applied Sciences Berlin, Applications of Internet of Things (IoT) and Blockchain for supply chain management in humanitarian Disasters
- ICTIS 2021, Wuhan, China, Prof. Jun Ren from LJMU, Prof. Wu Ouyang from WUT and Prof. Dong-Ling Xu organised a Special Session and acted as Chair of the Special Session in the 6th International Conference on Transportation Information and Safety, 22-24 October 2021. http://ictis.whut.edu.cn/.
- 8. WUT organized a seminar on the theme of "Disciplines Innovation for Smart Shipping and Maritime Safety" On October 6, 2021, Prof. Jin Wang and Prof. Zai-Li Yang and Prof. Dong-Ling Xu attended the meeting.



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9. ISAML 2022, Wuhan, China, 2nd International Symposium on Automation in Manufacturing and logistics. Prof. Wu Ouyang from WUT acted as Chair of a Special Session, and Prof. Zai-Li Yang made and Invited presentation.

Publications arising from the project

Journal papers

- 1. Makki A.A., Nguyen T.T., Ren J. (2019) "A New Level of Service Method for Roas Based on Available Perception Time and Risk of Sustaining Sever Injury or Death". IEEE Xplore, 14-17 July 2019.
- Ahlqvist, V., Norrman, A. and Jahre, M. (2020), "Supply chain risk governance: towards a conceptual multilevel framework", Operations and Supply Chain Management: An International Journal, Vol. 13 No. 4, pp. 382-395, <u>http://doi.org/10.31387/oscm0430278</u>
- J. Quan, X. F. Wang, X. J. Wang, D. Xia, J. B Yang (2020), "Performance optimization of supply chain based on cooperative contract with disappointment-aversion strategic consumers", Flexible Services and Manufacturing, <u>https://personalpages.manchester.ac.uk/staff/jianbo.yang/JB%20Yang%20Journal_Papers/QuangWangWangXiaYang-FSM-Sopply-Chain-Final%20Version.pdf.</u>
- 4. Makki A.A., T.T. Nguyen, J.Ren, D.Al-Jumeily, W.Hurst. (2020) "Estimating Road Traffic Capacity". IEEE Xplore, Vol 8, pp 228525-228547.
- 5. Fatima Almaghrabi, Dong-Ling Xu, Jian-Bo Yang, "An Evidential Reasoning Rule Based Feature Selection for Improving Trauma Outcome Prediction", Expert Systems with Applications, 1st round review.
- Thongsukdee, P., Weerawat, W., Physician Workforce Planning and Allocation Model using Agent-Based Modeling: A Case Study in Thailand, International Journal of Health Planning and Management, DOI: 10.1002/hpm.3041.
- 7. Wu Ouyang, Zhenjiang Zhou, Yong Jin, Xinping Yan, Yuanchang Liu, (2020), Ultrasonic measurement of lubricant film thickness distribution of journal bearing, Review of Scientific Instruments, 91(6), 065111, doi:10.1063/5.0007481.
- 8. Daniel Arias Aranda, Agustín López-Sánchez, Gustavo F. Bautista-Carrillo (2020), Analysis of the impact of high voltage power lines on the value of properties in environments of high ecological value and rural tourism: the case of the Lecrin valley (Granada Spain), International Journal of Business Environment.
- 9. Wan, C., Zhao, Y., Zhang, D., & Yip, T. L. (2021). Identifying important ports in maritime container shipping networks along the Maritime Silk Road. Ocean & Coastal Management, 211, 105738.
- 10. Yang, Z., Wan, C., * Yang, Z., & Yu, Q. (2021). Using Bayesian network-based TOPSIS to aid dynamic port state control detention risk control decision. Reliability Engineering & System Safety, 213, 107784
- T. Ren, J. Ren, DB. Matellini and S. Tammas-Williams." Characteristics, Challenges, and Opportunities of Vaccine Cold Chain", Global Business and Management Research: An International Journal, 13 (3). 2021, pp. 33-43. ISSN 1947-5667
- X.Y. Chen, J. B. Yang and D. L. Xu, "Inventory policy and heuristic for long-term multi-product perishable inventory routing problem with static demand", Journal of the Operations Research Society of China, Vol.10, pp.659–683, 2022.
- 13. Wan, C., Tao, J., Yang, Z. and Zhang, D. (2022), Evaluating recovery strategies for the disruptions in liner shipping networks: a resilience approach. International Journal of Logistics Management, 33(2), 389-409
- Ma, Q., Zhang, D., Wan, C., Zhang, J., & Lyu, N. (2022). Multi-objective emergency resources allocation optimization for maritime search and rescue considering accident black-spots. Ocean Engineering, 261, 112178.
- Liu, K., Yu, Q., Yang, Z., Wan, C., & Yang, Z. (2022). BN-based port state control inspection for Paris MoU: New risk factors and probability training using big data. *Reliability Engineering & System Safety*, 224, 108530.
- Changxiong Ning, Fei Hu, Wu Ouyang*, Xinpin Yan. Wear monitoring method of water-lubricated polymer thrust bearing based on ultrasonic reflection coefficient amplitude spectrum[J]. Friction, 2022. DOI: 10.1007/s40544-022-0643-4

Conference papers



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- 1. Arias Aranda, D.; Molina Fernández, L.M.; Stantchev, V. (2019): Integration of Internet of Things (IoT) and Blockchain to increase humanitarian aid supply chains performance, 5th International Conference on Transportation Information and Safety, 14-17 July 2019. <u>http://ictis.whut.edu.cn/</u>.
- 2. Wan C., "Identifying influential ports in maritime shipping networks based on multi-criteria decision making", The 2nd International Conference of the Yangtze River Research and Innovation Belt (Y-RIB), December 1-3, Chongqing, China, 2019.
- 3. Ahlqvist, V.; Norrman, A.; Jahre, M. (2019): RISK GOVERNACE FOR PROTECTING CRITICAL INFRASTRUCTURE SUPPLY CHAINS: TOWARDS A CONCEPTUAL MULTI-LEVEL FRAMEWORK, 9th International Conference on Operations and Supply Chain Management, 15-18 Dec 2019, Ho Chi Minh City, Vietnam. <u>https://www.journal.oscm-forum.org/journal/proceeding/conf_paper/oscm-conf-risk-governace-for-protecting-critical-infrastructuresupply-chains-towards-a-conceptual-multi-level-framework</u>
- 4. Makki A.A, T. T. Nguyen, J. Ren, W. Hurst and D. Al-jumeily, "Utilizing automatic traffic counters to predict traffic flow speed", *Proc. 12th Int. Conf. Develop. eSystems Eng. (DeSE)*, pp. 823-830, Oct. 2019.
- Kong, S., Liangrokapart, J., Developing Performance Measurement System in Food Industry: A Literature Review, Proceedings of 9th International Conference on Operations and Supply Chain Management (OSCM 2019), 15-18 December 2019, Ho-Chi-Minh-City, Vietnam.
- 6. Liangrokapart, J., 2020, Metro Performance Indicators for Service Operations in Thailand, In W. Weerawat et al. (eds), Urban Rail Transit (pp.99-113), Springer Nature, doi: 10.1007/978-981-15-5979-2_5.
- Lindström, J., and Johansson, J. (2020). Towards Understanding Critical Flows A Literature Review. In P. Baraldi, F. Di Maio, and E. Zio (Eds.) Proceedings of the 30th European Safety and Reliability (ESREL) Conference and the 15th Probabilistic Safety Assessment and Management (PSAM) Conference, Venice, Italy, 2-4 November 2020. Research Publishing, Singapore. ISBN/DOI: 978-981-14-8593-0.
- Doung, P., Sirovetnukul, R., Ren, J., Simulation-based Assembly Line Balancing in U-shaped, Parallel Ushaped, and Parallel Adjacent U-shaped Layouts. Proceedings of the 2020 IEEE International Conference on Industrial Engineering and Engineering Management, p. 751-755
- 9. Zhi Yang, Xinping Yan, Wu Ouyang, Bai Hongfen. (2021): Sensorless PMSM Control Algorithm for Rim-Driven Thruster Based on Improved PSO. Proceedings of the 6th International Conference on Transportation Information and Safety (ICTIS 2021), Wuhan, China, October 22-24, 2021: 285-292.
- 10. Wenxiao Jin, Xinping Yan, Wu Ouyang, Jun Ren. (2021): Damage identification of RDT non-metal motor sheath based on helical guided wave. Proceedings of the 6th International Conference on Transportation Information and Safety (ICTIS 2021), Wuhan, China, October 22-24, 2021: 1161-1165.
- 11. He, R., Wan, C., & Jiang, X. (2021, October). Risk Management of Port Operations: a Systematic Literature Review and Future Directions. In 2021 6th International Conference on Transportation Information and Safety (ICTIS) (pp. 44-51). IEEE.
- Chukwuka O.J., Ren J., Paraskevadakis D., (2021) "A preliminary research on purchasing relief supplies in disaster response", The 1st Business and Entrepreneurship International Conference, 31 March – April 1 2021, Oman
- 13. Chukwuka O.J., Ren J., Wang J., Paraskevadakis D., (2021) "A research on risk management in emergency supply chains", Logistics Research Network Conference, September 8-10 2021, Cardiff, UK
- 14. Tao, J., Zhang, D., & Wan, C. (2021, October). Review of Maritime Shipping Networks Research in the Context of the Belt and Road Initiative. In 2021 6th International Conference on Transportation Information and Safety (ICTIS) (pp. 183-190). IEEE.
- T. Ren, J. Ren, B. Matellini, S. Tammas-Williams and W. Ouyang, "The trend of modern cold chain management: Characteristics, challenges and opportunities of vaccine logistics," 2021 6th International Conference on Transportation Information and Safety (ICTIS), 2021, pp. 669-673, doi: 10.1109/ICTIS54573.2021.9798659.
- Chukwuka O.J., Ren J., Paraskevadakis D., (2021) "A research on purchasing relief supplies in disaster relief operations", International Conference on Transportation Information and Safety (ICTIS 2021), October 22-24 2021, Wuhan, China

Other publications

Invited presentations

- Jun Ren, "Emergency Supply Chain Management: Challenges and Opportunities", invited presentation at Mahidol University, Bangkok, 11th June. 2019
- 2. Dong-Ling Xu, "Data-Driven Evidential Reasoning for Automobile Insurance Fraud Detection", a plenary presentation at the 4th International Symposium on Evidential Reasoning and Artificial Intelligence, Kunming, Yunnan, China, 31 July, 2019.



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- 3. Jian-Bo Yang, "Interpretable Machine Learning and Decision Making via Evidential Reasoning", invited presentation at Tongji University, Shanghai, 7th Aug. 2019
- 4. Professor Dong-Ling Xu and Professor Jianbo Yang from UNIMAN delivered seminars on "Interpretable Machine Learning and Decision Making via Evidential Reasoning"
- Professor Dong-Ling Xu from UNIMAN provided a keynote speech on "Business Analytics and AI Decision Systems Research and Application" at the Seventh International Research Conference on Systems Engineering and Management Science in Hefei, China.
- 6. Professor Andreas Norrman from LUSE provided a lecture on "Multiple Case Study Analysis", invited presentation at Mahidol University, Bangkok, 8th Oct 2019.
- 7. Professor Andreas Norrman from LUSE provided a lecture on "Measuring Change Initiatives" invited presentation at Mahidol University, Bangkok, 10th October 2019.
- 8. Presentation of the ReMESH project to Bachelor, Master and PhD students of the University of Bonn. Introduction of the project to students interested in taking part of the project. November 2019.
- 9. Dr Jun Ren, "REMESH project and its Implementations", invited presentation at Business School of DCU, Dublin, 12^{ed} Feb. 2020
- 10. Dr. Ha-Nam Nguyen, introduction of ReMESH project at International School of VNU, August 26th, 2020
- 11. Dr. Ha-Nam Nguyen, introduction of ReMESH project and its application at University of Science and Technology The University of Danang (DUT), November 16th, 2020
- Chengpeng Wan, "A resilience-based approach for assessing the performance of recovery strategies of liner shipping network disruptions", invited presentation at the10th Transportation Research Forum, Shanghai, 26th March. 2022.
- Professor Dong-Ling Xu from UNIMAN provided a seminar to WUT on 24 Aug. 2022 with a title "Evidential Reasoning (ER) Rule for Evidence Based Decision Making, Probabilistic Inference, & Explainable Machine Learning"
- Chengpeng Wan, "Evolution mechanism of water traffic accident risk A complex network perspective", invited presentation at the10th International Conference on Traffic and Logistic Engineering, Macao, 14th August. 2022.
- 15. Dr Jun Ren from LJMU provided a seminar to Mahidol University on 20 September 2022 with a title "Emergency Supply Chain and Decision Making Tools"

