



## Ancillary services in aCTIVE distribution networks bAsed on moniToring and control tEchniques

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## 1. Executive summary

Deliverable **D6.2** entitled “**List of published scientific papers**” presents in the next subsections the list of the published papers per year. In total 12 journal and 7 conference papers have been published. All papers can be accessed via the corresponding DOI provided.



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## 2. List of published papers

### 2.1. 2020

- 1) K. D. Pippi, T. A. Papadopoulos and G. C. Kryonidis, "Impact Assessment Framework of PV-BES Systems to Active Distribution Networks," Med. Conf. Power Gener., Transm., Distrib. Energy Convers. (MedPower 2020), pp. 1-6, DOI: [doi: 10.1049/icp.2021.1221](https://doi.org/10.1049/icp.2021.1221)
- 2) K. D. Pippi, T. A. Papadopoulos and G. C. Kryonidis, "Viability Assessment of PV Systems in University Campuses Under the Net-Metering Policy," 2020 55th International Universities Power Engineering Conference (UPEC), Torino, Italy, 2020, pp. 1-6. DOI: [10.1109/UPEC49904.2020.9209820](https://doi.org/10.1109/UPEC49904.2020.9209820)

### 2.2. 2021

- 3) G. C. Kryonidis, A. I. Nousedilis, K. D. Pippi and T. A. Papadopoulos, 'Impact of Power Smoothing Techniques on the Long-Term Performance of Battery Energy Storage Systems,' 2021 56th International Universities Power Engineering Conference (UPEC), Teeside University, UK, 2021, pp. 1-63. DOI: [https://10.1109/UPEC50034.2021.9548172](https://doi.org/10.1109/UPEC50034.2021.9548172)
- 4) I.S. Lampranidou, T.A. Papadopoulos, G.C. Kryonidis, E. Fatih Yetkin, K.D. Pippi, A.I. Chrysochos, 'Assessment of load and generation modelling on the quasi-static analysis of distribution networks,' Sustainable Energy, Grids and Networks, vol. 27, 2021, 1005091. DOI: <https://doi.org/10.1016/j.segan.2021.100509>
- 5) G. C. Kryonidis, E. O. Kontis, T. A. Papadopoulos, K. D. Pippi, A. I. Nousedilis, G. A. Barzegjar-Ntovom, A. D. Boubaris and N. P. Papanikolaou, 'Ancillary services in active distribution networks: A review of technological trends from operational and online analysis perspective,' Renewable and Sustainable Energy Reviews, vol. 147, September 2021, , vol. 114795, pp. 60433-60446, 2021. DOI: <https://doi.org/10.1016/j.rser.2021.111198>
- 6) E. O. Kontis, I. S. Avgitidis, T. A. Papadopoulos, G. A. Barzegjar-Ntovom and G. K. Papagiannis, 'Multi-channel measurement-based identification methods for mode estimation in power systems,' Electric Power Systems Research, vol. 195, pp. 60433-60446, 2021. DOI: <https://doi.org/10.1016/j.epr.2021.107157>
- 7) K. D. Pippi, T. A. Papadopoulos and G. C. Kryonidis, 'Methodology for the Techno-Economic Assessment of Medium-Voltage Photovoltaic Prosumers Under Net-Metering Policy,' IEEE Access, vol. 9, pp. 60433-60446, 2021. DOI: <https://doi.org/10.1109/ACCESS.2021.3073780>.





### 2.3. 2022

- 8) K. D. Pippi, T. A. Papadopoulos and G. C. Kryonidis, 'Impact assessment framework of PV-BES systems to active distribution networks', IET Renewable Power Generation, vol. 16, iss. 1, pp. 33-47, 2022. DOI: <https://doi.org/10.1049/rpg2.12313>
- 9) T. A. Papadopoulos, E. O. Kontis, G. Barzegkar-Ntovom, and P. Papadopoulos, 'A Three-Level Distributed Architecture for the Real-Time Monitoring of Modern Power Systems,' IEEE Access, vol. 10, pp. 29287-29306, 2022. DOI: <https://doi.org/10.1109/ACCESS.2022.3159340>.
- 10) G. Barzegkar-Ntovom, E. O. Kontis, T. A. Papadopoulos and P. Papadopoulos, 'Methodology for Evaluating Equivalent Models for the Dynamic Analysis of Power Systems,' IEEE Transactions on Power Delivery, vol. 37, no. 6, pp. 5059 – 5070, 2022. DOI: <https://doi.org/10.1109/TPWRD.2022.3167136>
- 11) T. A. Papadopoulos, G. Barzegkar-Ntovom, E. O. Kontis and E. A. Koukoulintas, 'Combined Transmission and Distribution Test System for Small-Signal Stability Analysis: Initial Results,' 2022 57th International Universities Power Engineering Conference (UPEC), Istanbul, Turkey, 2022, pp. 1-6. DOI: <https://doi.org/10.1109/UPEC55022.2022.9917807>
- 12) K. D. Pippi, G. C. Kryonidis, A. I. Nousedilis and T. A. Papadopoulos, "A unified control strategy for voltage regulation and congestion management in active distribution networks," Electric Power Systems Research, vol. 212, 2022, 108648. DOI: <https://doi.org/10.1016/j.epsr.2022.108648>
- 13) K. D. Pippi, G. C. Kryonidis, A. I. Nousedilis and T. A. Papadopoulos, "Assessing the Provision of Ancillary Services Considering BES Capacity Degradation," 2022 International Conference on Smart Energy Systems and Technologies (SEST), 2022, pp. 1-6. DOI: <https://doi.org/10.1109/SEST53650.2022.9898493>
- 14) T. A. Papadopoulos, G. A. Barzegkar-Ntovom, E. O. Kontis and G. K. Papagiannis, "Identification of Closed-spaced and Poorly-damped Oscillatory Modes in Ringdown Responses of Power Systems," 2022 2nd International Conference on Energy Transition in the Mediterranean Area (SyNERGY MED), 2022. DOI: [10.1109/SyNERGYMED55767.2022.9941458](https://doi.org/10.1109/SyNERGYMED55767.2022.9941458)
- 15) E. P. Saroudis, T. A. Papadopoulos, G. A. Barzegkar-Ntovom, E. O. Kontis and G. K. Papagiannis, "Wavelet-based Automatic Processing of Dynamic Responses for the Development of Dynamic Load Models," 2022 2nd International Conference on Energy Transition in the Mediterranean Area (SyNERGY MED), 2022. DOI: [10.1109/SyNERGYMED55767.2022.9941470](https://doi.org/10.1109/SyNERGYMED55767.2022.9941470)
- 16) C. L. Athanasiadis, T. A. Papadopoulos, G. C. Kryonidis and K. D. Pippi, "A Benchmarking Testbed for Low-Voltage Active Distribution Network Studies,"





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in IEEE Open Access Journal of Power and Energy. DOI:  
[10.1109/OAJPE.2022.3232186](https://doi.org/10.1109/OAJPE.2022.3232186)

## 2.4. 2023

- 17) T. A. Papadopoulos, K. D. Pippi, G. A. Barzegkar-Ntovom, E. O. Kontis, A. I. Nousdilis, C. L. Athanasiadis, G. C. Kryonidis, “Validation of a Holistic System for Operational Analysis and Provision of Ancillary Services in Active Distribution Networks”, *Energies*, 16(6), 2787, 2023. DOI: <https://doi.org/10.3390/en16062787>
- 18) K. D. Pippi, A. D. Boubaris, G. C. Kryonidis, N. P. Papanikolaou, T. A. Papadopoulos, “Transient performance of a unified control system for the provision of ancillary services in low-voltage distribution networks”, *EPSR*, vol. 220, pp. 109293, 2023. DOI: <https://doi.org/10.1016/j.epsr.2023.109293>
- 19) G. A. Barzegkar-Ntovom, E. O. Kontis, T. A. Papadopoulos, “Application of a performance assessment method to identify the applicability range of distribution network equivalent models”, *EPSR*, vol. 220, pp. 109245, 2023. DOI: <https://doi.org/10.1016/j.epsr.2023.109245>



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