

**Unlicensed LTE Pricing for  
Tiered Content Delivery and  
Heterogeneous User Access**

**MICANS INFOTECH**

# ABSTRACT

- A premium content delivery deal is further designed via the optimal auction in order to efficiently allocate the scarce radio resources for the CPs with higher traffic load and QoS requirement.
- Thus, the SP and CPs form a prioritized spectrum game, and the SP and EUs form a radio access subscription game.
- By backward induction, we derive the basic delivery price and the premium delivery price to CPs, the reservation price, and the LTE-only and LAA subscription prices to EUs.

# EXISTING SYSTEM

- It has been a significant issue to satisfy the rapidly growing data traffic with the limited wireless radio resources.
- Licensed-assisted access to unlicensed spectrum brings hope for the service provider to mitigate the deficiency of radio resources.
- This work contributes on designing a pricing model in a licensed and unlicensed coexisting network, modelled as a two-sided market with content providers and end users at the SP's two sides.

# PROPOSED SYSTEM

- Analysis shows that all players benefit from the premium delivery deal and co-existence of unlicensed LTE.
- To satisfy the increasing traffic demand, the next generation wireless broadband systems are expected to utilize both licensed and unlicensed spectrum.
- In this work, we design a two-sided network pricing framework with licensed and unlicensed spectrum coexistence.
- In addition, the premium content delivery deal and heterogeneous user subscription are proposed.

# HARDWARE REQUIREMENTS

- Processor - Intel core i3
- RAM - 2B
- Hard Disk - 20 GB

**MICANS INFOTECH**

# SOFTWARE REQUIREMENTS

- Operating System : LINUX
- Tool : Network Simulator-2
- Front End : OTCL (Object Oriented Tool Command Language)

**MICANS INFOTECH**

# REFERENCE

- [1] “METIS Official Website.” Nov. 5, 2015. Retrieved from <https://www.metis2020.com/>, 2015.
- [2] A. Osseiran et al., “Scenarios for 5G Mobile and Wireless Communications: the Vision of the METIS Project,” May 2014.
- [3] L. Zhang, W. Wu, and D. Wang, “Time Dependent Pricing in Wireless Data Networks: Flat-rate vs. Usage-based Schemes,” Apr. 2014.
- [4] S. Sen et al., “Incentivizing Time-Shifting of Data: a Survey of Time-Dependent Pricing for Internet Access,” Nov. 2012.
- [5] N. Economides and J. T. O’Rourke, “Network Neutrality on the Internet: A Two-sided Market Analysis,” 2012.