

Slicing Management through a Resource Marketplace

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Abstract: Network slicing is expected to radically change the relations among different actors of the telecommunications ecosystem, where new players, active in different markets, could benefit of connection solutions tailored to their need. In this context, dynamic sharing of resources among slice tenants can provide not only efficiency and cost savings, but also the opportunity for resource negotiation in a marketplace that can unleash the potential of new business relationships. In this talk, I will describe how tenants can automate their strategic behaviors in the network slicing resource marketplace, based on their instantaneous need and business intents. The proposed framework is based on game theory and has been integrated with real-time MAC scheduler implementations to enable dynamic resource sharing. The framework provides not only a viable practical solution and it also allows to get insight into the adoption of dynamic pricing schemes, that are of timing interest for the commercial implementation of the next 5G releases.