

Moving spectrum markets up the stack



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Research project proposal

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- It is increasingly clear that trading "naked spectrum" is infeasible
- Secondary markets are needed for asset price discovery
- Suppose we treat (lower level) connectivity as a service supported by trading markets?

What needs to be done

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- Demonstrating how a heterogeneous infrastructure can be used to provision a variety of services.
- Determining the limits (of heterogeneity, trading time, etc.) within which trading markets are feasible
- Identifying service types that can function within the feasibility region

Benefits

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- #occupyspectrum
- Enabling wireless systems with few assumptions about industry structure and technology
- Trading markets enable price & capability discovery for spectrum entrants, which can stimulate innovation
- Price signals are a necessary component for efficient spectrum investment

