

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20054**

In the Matter of)	
)	
Promoting Efficient Use of Spectrum)	WT Docket No. 00-230
Through Elimination of Barriers to the)	
Development of Secondary Markets)	

**COMMENTS OF
POWERLOOM CORPORATION**

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PowerLoom Corporation hereby submits comments in support of the Federal Communications Commission (“FCC” or “Commission”) in the creation of a secondary market, as outlined in the *Notice of Proposed Rule Making* (“NPRM”)¹ for the trading of radio spectrum. It is our intent to notify and inform the FCC that technology developed by and commercially available from PowerLoom may be used to build highly scalable, transparent electronic marketplaces that enable the real-time buying and selling of standardized and non-standardized products and services.

PowerLoom is a technology company that has developed a multi-dimensional matching and market-clearing engine to permit trading partners to exchange goods and services while, at the same time, permit them to maintain their competitive advantage.

We echo a number of commenting companies in that to create a liquid market, rules need to be relaxed and risk to the participants mitigated to the greatest degree possible. We also realize that there are genuine concerns that interference, frequency coordination, and other technical rules be observed.² The technology that we have developed will enable flexible rules-based trading and the definition of mutually exclusive rules. For example, while our technology cannot prevent the lessee(s) from generating interfering signals on operational systems, we can structure the trading environment such that the lessee(s) is/are aware of site-by-site exclusions to the geographic license they desire through the use

¹ *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, WT Docket No. 00-230, (rel. November 27, 2000)

² *NPRM* at paras. 35-37.

of an exclusions variable in our system. We also have the ability to contain additional descriptive information on adjacent licensees. This information would be available to the prospective licensee(s) prior to entering a transaction and would inform them of the parties to which frequency coordination would need to be engaged. However, we believe that regardless of the final policies adopted by the FCC, PowerLoom's trading platform can be a key component in complying with the FCC's directives. We have the ability to collect any amount of information and present it via our multi-dimensional matching system. We are not constrained by the limits on the dimensions, or variables, that need to be taken into consideration.

Our software product replicates existing bid/ask stock markets and in-house market-maker trading desk software. It differs from stock ECN's however, in that it enables *trading in any number of variables beyond just price and quantity*. These would include such things as frequency bands, service areas, license duration, renewal terms, and many other trade decision criteria. In addition, we support the sale, lease, divisibility and aggregation of offers to match the supply/demand equation. Other factors of importance might also include the credit stability of the trading partner, negotiated liquidated damages, and a host of quality parameters that may be relevant to support various applications. In short, any assumption that bandwidth spectrum needs to be reduced to a standardized commodity so that it may be traded in a secondary, online trading exchange is false. We think this offers a winning scenario for all constituents concerned with spectrum trading.

The FCC also seeks comment on the availability of information on spectrum use and who

should act as the repository of that information.³ In addition, the FCC believes visibility into the opportunity costs of using or not using spectrum, will also foster liquidity and participation.⁴ The private markets are best suited to collect and disseminate this type of information. The transparency generated by our technology within such an exchange will permit market demand to be efficiently matched with supply. As we know from copper and fiber based networks, price reductions in capacity or access are met swiftly with a surge of demand. The response by carriers is to increase supply, but not before the laborious task of financial and operational risk assessment. By providing immediate visibility to supply/demand dynamics, suppliers can develop an accurate risk profile in a shorter period of time and react with additional supply when it fits their operational and risk objectives. PowerLoom's trading solution would collect this information in real-time and provide the type of visibility required by the market participants. The information collected would be based upon all relevant decision criteria such that market participants could obtain valuable real-time data across variables such as frequency bands, service areas, license duration, renewal terms, sale prices, lease prices, divisibility and aggregation offers and all affiliated parties to the transaction. A database of all previous FCC auctions could be stored, in addition to the information collected via lease transactions, so that all information is contained in a central repository.

The FCC seeks comment regarding the creation of standardized contractual language to

³ *NPRM* at paras. 99-100.

⁴ *NPRM* at para. 11

ensure licensee(s) and lessee(s) meet their responsibilities with regard to interference, technical, and service rules.⁵ While we believe that some standardized contractual language should be part of any lease agreement, FCC mandates should be restricted to interference, and anti-competitive issues. As with other, unregulated markets today, market participants agree on the contractual terms and conditions governing their trading behavior. We do not believe that it is necessary for the FCC to design a standardized contract that may or may not be in the best interest of all participating parties. As a practical matter, we believe the role of the FCC, with regard to radio spectrum licensing, should be limited to protection from interference and anti-competitive practices. Using existing technology, it would not be necessary for the FCC, or any other entity, to undertake the role of establishing a standard set of contractual terms by which all trading partners would be bound. This would create artificial constraints, cause additional undue delay and added risk on what could otherwise be a natural marketplace. We have witnessed the unsuccessful efforts of existing network operators in trying to design a standardized contract for the trading of non-radio network capacity.

Creating a standardized contract is a well-known, practical, but sub-optimal alternative solution to being able to handle the electronic trading of complex goods and services. Information about all of the relevant criteria surrounding a buy/sell decision is necessary prior to making that decision.

⁵ *NPRM* at para. 30.

A better alternative is to deploy technology that permits the matching of buyers and sellers on all of the criteria that is important to them. The ability to compare almost-standardized offerings is what PowerLoom has developed.

Currently, premise-based network operators use each other's capacity on a regular basis under trading contracts. Contract negotiations for this type of exchange are usually one-to-one, may take months to finalize and eventually interconnect each other's systems.

A new business process is emerging to enable this exchange of bandwidth, co-location space, minutes, lambdas, and routed IP packets to occur much more efficiently. As in the energy industry, neutral pooling points with interconnected network operators are being built. Internet enabled software and provisioning processes are being deployed to speed the transfer and interconnection of network capacity, all without the oversight of the FCC.

The benefits of such an exchange are numerous. Not only will this encourage competition yielding improved choice and value for the ultimate consumer of the services, but the value of spectrum will, at any given point in time, reflect the current state of supply and demand in a given market much like the fluctuations in the value of a stock after its IPO.

Arguably, the long-term benefits will far outweigh the short-term fears as evidenced by the enormous success of deregulation of the telecommunications industry since 1984.

Without deregulation, competition would not have emerged as quickly, prices would not

have dropped in response, bandwidth would not be as prevalent, and the Internet might still be the bastion of research departments and our university think tanks.