## information renaissance

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## Internet Services for the Alcoa Building

In the first public meeting to discuss services for non-profit organizations in the Alcoa Building, Information Renaissance suggested that Internet connectivity be included on the menu of services to be offered. The present memo expands upon this idea, with emphasis upon the advantages of dealing with network services as a package, to be administered by the building's landlord or by a contractor operating under instruction from the building's landlord.

The types of services that Information Renaissance proposes for the Alcoa Building are as follows. Information Renaissance would be able to provide any of these services or to supervise the provision of these services by other contractors.

• <u>Building Level Connectivity</u>. This would involve a high-speed link to the Internet which could be shared by all building tenants through an internal network, as described below. Advantages to this arrangement over individual network connections for each building tenant include substantial cost savings and higher peak bandwidth.

• <u>Internal Network.</u> This involves the development of Local Area Networks with drops to serve each building tenant. The Local Area Networks would form an internal network linked to the building's shared Internet connection. It may be possible to make use of existing building wiring for a portion of the office level connectivity. Advantages of dealing with this wiring on a building-wide level include economies of scale in the wiring jobs and assurance of uniformity in the environment provided to each tenant. This translates into reduced costs for maintenance and future expansion.

• <u>Common Services.</u> If the networking architecture for the Alcoa Building is to involve shared external connectivity and a common internal wiring plant, then it will be easy to provide building tenants with a set of common network services. These include firewalls to deter external attacks on the network, a common Web site for building tenants, caching servers to improve network performance, backups for file security, and other security services such as the distribution of encryption keys. Such services can be provided at far lower cost if they are developed on a building-wide basis than if individual tenants would have to contract for them.

• <u>Support Services.</u> If network connectivity is provided as a basic service in the Alcoa Building, then it will be possible to provide a high level of associated user support. Personnel in the building could respond promptly to user inquiries and could rapidly trouble-shoot problems with the Local Area Networks or with individual servers or user machines.

The model that is described in this memorandum is one in which the landlord or a designated contractor functions as the Internet Service Provider for the building. Information Renaissance believes that this is the optimal method for providing Internet services in an environment such as the Alcoa Building. Detailed cost estimates and implementation timelines can be provided upon request.