

## 2. OBJECTIVES

The objectives of the PICES Metadata Federation project are to create standardized metadata descriptions of national, institutional and agency databases and to serve those descriptions in a World-Wide Web-based, one-stop environment with search and delivery capability. Such a federated or distributed system has many benefits.

Federation is a process of joining for mutual benefit. For example, suppose Provider 1 produces bread, and Provider 2 produces butter. In a non-federated system, a consumer wanting bread would have to get it from Provider 1, and butter

would only be available from Provider 2. However, if Providers 1 and 2 are willing and able to cooperate, each provider can maximize the distribution of its own product by also offering it through the other provider. This is a federation.

This federation promotes efficiency for the provider and the consumer. Each provider effectively boosts its product line by having available more products without actually having to produce them. The consumer benefits by being able to locate more products without having to know more providers.