

## VIPNET

### Virtual Production Enterprise Network

IMS Project No. 01002

- Provides effective means for a virtual enterprise to successfully network in a virtual mode via Intranet and Internet
- Shared technological data, information, and knowledge to create advanced products, technologies and services

#### Project Summary

With the advance of information technologies, trend is on the rise for many a company to network in a virtual mode. The means and tools to date available, however, do not meet all the requirements for a truly effective networking. This is because they are not really capable of handling higher and more complex intelligence known as knowledge than relatively simple data and information.

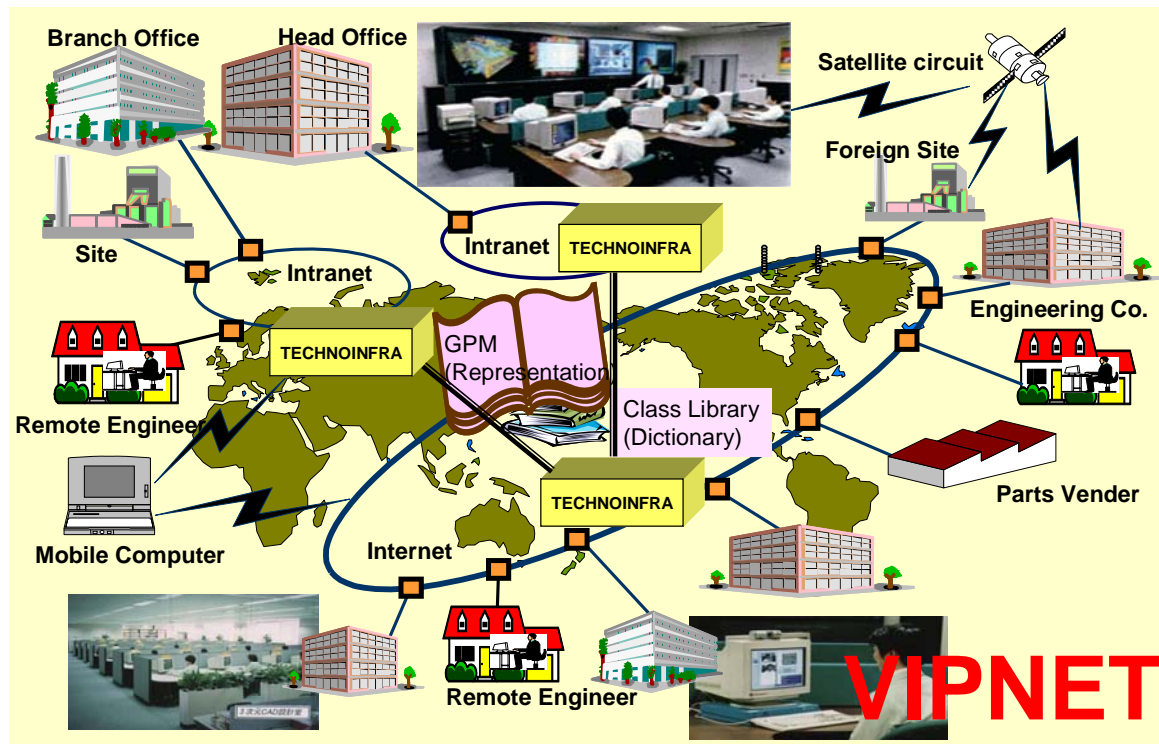


Figure 1.1 Image of a Virtual Production Enterprise Network (VIPNET) using TECHNOINFRA

The VIPNET project herein proposed aims at developing a new, state-of-the-art inter-enterprise information sharing and exchanging system, called Technological Information Infrastructure (TECHNOINFRA), that is capable of handling not only data and information but also knowledge of a far more complex nature than the former. TECHNOINFRA will provide a truly effective means for a virtual enterprise comprising a host organization or its head-office and a number of client organizations including their



branch offices, productions facilities, part vendors and suppliers among others, many of them located in different countries or regions, as shown in Fig. 1.1, to successfully network in a virtual mode via Intranet and Internet.

The VIPNET international project is based on and is an extended version of a project that has already been carried out domestically in Japan over the past four years by the Japanese group of the proposed consortium, and is designed to create through this international collaboration, a new TECHNOINFRA sufficiently generic to be globally applicable and capable of operating independently on specific hardware and software.

Work will start by tests and assessments of the performance and the functionalities of the previously developed TECHNOINFRA in order to determine the specification requirements for the new TECHNOINFRA, in collaboration with the international consortium partners. A new architecture will then be created for the new TECHNOINFRA, which will meet the requirements as determined. Further work will then follow to develop a set of supporting and application technologies for the new TECHNOINFRA incorporating the new architecture. Finally, the performance and the functionalities of the new TECHNOINFRA will be verified and validated along with the supporting and application technologies.

The TECHNOINFRA will provide a truly effective means for a virtual enterprise to efficiently network via Intranet and Internet by sharing not only technological data and information but also knowledge among all the elements constituting the network and allow it to create advanced products, technologies and services.

## Partners

Region	Organization	Type
Canada	UQO (RCP)	Edu
Canada	NRC-IMTI	RO
Canada	UWO	Edu
Canada	Timelog International	Ind
Japan	Hitachi (ICP, RCP)	Ind
Japan	HPC	Ind
Japan	AIE	Ind SME
Japan	TMU	Edu
Japan	U. of Tokyo	Edu
Korea	IAE	RO
Korea	KAIST (RCP)	Edu
Switzerland	EPFL (RCP)	RO
Switzerland	Maillefer	Ind SME
Switzerland	Bombardier	Ind