6.1 Conclusion

With ever growing business need to support IT & ITES services for various customers, it is essential for enterprises to leverage a global framework which would make their communication infrastructure – agile, resilient and reliable. Though telecom service providers offer new services to these enterprise customers, each organization would be required to have their own flexible service model which would allow them to be agile and adept to unique and varied customer needs.

It is to be noted that by adopting this global communication framework, enterprises can meet most of their customer specific business requirements. Also the basic intention of outsourcing by these customers is to reduce costs. By adopting or considering this global communication framework there would be sizeable cost reduction which would make these enterprises much more cost effective and agile in their overall business operations. By adopting the framework model, enterprises would see considerable reduction in overall program timeline and cost reduction. This framework can also be leveraged to support multiple customers and thereby making it more resilient and redundant model across the globe.

This would also simplify the communication network infrastructure managed within enterprises much more robust and cost effective. Such enterprises, which adapt this global framework, could add value to their existing and new customers by leveraging this global framework for providing better service levels. Also they would be able to provide timely and cost effective value proposition to their internal business units and in turn have better customer satisfaction levels.
Following is the summary based on the validation and test results:

- Reduction in infrastructure deployment time frame – 2 weeks minimum
- Reduced the independent and disparate infrastructure
- Increase resource utilization and cost optimization
- Reduce infrastructure costs – 10% minimum
- Reduce supporting manpower costs
- Reduce hardware and software support costs
- Ability for customers to leverage nearest global Points of Presence
- Flexibility in operating out of any global office locations
- Ability to add infrastructure in case of a Business Continuity scenario
- Flexible cost model – Fixed or Usage based on service option chosen
- Flexibility to increase/decrease/terminate infrastructure on demand
- New business service offering to customers
- Easy manageability of infrastructure

Apart from the above there were other factors which would indirectly benefit the enterprise and those are listed below:

(i) Leverage and optimize existing enterprise communication technology services
(ii) Provide ready and secure infrastructure for customers
(iii) Hybrid models can also be deployed for specific customer requirements
(iv) integrates with customer infrastructure environment
(v) fully secure, agile, resilient and redundant

While the global framework model could be adopted as is, enterprises needs to spend effort and time in studying their overall network infrastructure and if
required do necessary re-engineering. This would help in better managing their internal and customer requirements and needs much more effectively and securely.

6.2 Future Scope

While this global framework has been implemented and found cost effective, viable, agile, resilient and flexible with currently available enterprise communication networks technologies. These communication infrastructure networks have either been provisioned and managed by telecom service providers or provisioned by telecom service providers and fully managed by enterprise network teams.

While there are many open problems and extensions to this service oriented model which could be taken for our future study and contribution in this field. Some of the possible suggestion and scope for future work are described below:

- Enterprises or telecom Service providers can start offering this global Agile Infrastructure Communication model as value added services to their enterprise customers.

Currently telecom service providers are providing enterprise communication networks and managed services for the same. With more companies going for global operations, it would be good if enterprises and telecom Service providers can offer the GAICN model as a service to their customers. This could be one area of research for validating this model commercially as a “ready” service for their customers.

- Currently this model has been found successful with data and voice services, it would be worthwhile to consider whether video could also be included as part of this service by telecom service providers or enterprises for their customers.

- Currently allocation of network bandwidth to the various customer requirements are manual and with pre-agreed downtime or during green zone periods. Future study could consider how dynamic allocation of bandwidth can be done.