



## Edinburgh Network Technologies Ltd. and University of Stirling

**Prog. No. 4132 – Local Management Committee Meeting (LMC 03)**

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### **Associate's Report for LMC 03**

#### **Mr Colin Cameron**

The report will be presented to the LMC 03 meeting to take place at 3pm on *Monday 17th November 2003* at *EdNet, 12 Dock Place, Leith*.

#### **Circulation:**

Dr. A. Kurt-Elli (Chair)  
Mr. M. Kurt-Elli (Industrial Supervisor)  
Prof. E. H. Magill (Lead Academic, Secretary)  
Mr. A. J. Mitchell or Dr. John Brain (TCS Consultant)  
Prof. K. J. Turner (Second Academic)

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### **Executive Summary of Voice over IP softswitch project.**

#### **Project Aim**

The aim of this project is to design and implement a functioning voice over IP 'softswitch' implementing IP Centrex capability. Since the beginning of the project this has been expanded to the support and enhancement of the softswitch platform which mainly revolves around creating 'value-added' features for end users.

This project forms part of edNet's main business in the future, further to this it provides opportunity for working with the knowledge base partner in several areas of leading edge research.

#### **Activity since Previous Meeting**

At the last LMC the first phase of the project had been completed, providing basic telephony functionality for customers. Since that meeting we have almost completed the second phase of the project. The second phase is slightly behind schedule due to a major customer rollout, future rollouts should have less effect of the timescale as we become more experienced. In addition the service is now being used by several customers and edNET are pursuing several other avenues and partnerships.

#### **Achievements to Date**

The main goal of the second phase of the project was to rework the implementation of telephony services (such as Call Forwarding or Hunt Groups) on the softswitch platform. The new version will allow us to add new services far more quickly and without any interruption to the basic services. Several features were selected to be implemented as part of this phase, these were Call Diversion, Call Pickup, Call Return, Que Service and Hunt Groups. The new implementation and these features are now in the early testing stages and we expect them to be available to customers by the end of the year.

As well as this we have continually improved the customer and reseller interfaces on the main nplusone website. This being in addition edNET supporting other resellers.

In addition we will soon have a media server (developed by another company) which will provide services such as voicemail and music on hold. In the future it will provide fully customisable interactive voice menus.

In order to practice some skills and techniques that I was taught during module two I have been running weekly team meetings. This has provided a useful structure to review issues and overall progress. I have also attended several worthwhile training courses and other events.

All of this means that edNET can now offer an IP Telephony system, however to compete in the marketplace we need to offer extra features that make us stand out from both the IP Telephony competition and the older circuit-switched telephony network.

### **Proposals for future action**

Once the second phase of the project is complete we will embark on phase 3. This is likely to add new services, but will also need to address the scalability of the system as we add new customers.

To achieve the future requirements of the project I will need to extend my knowledge of telephony APIs, and network infrastructure. It would be useful to understand customer requirements better, in particular what features that are not available with old-style telephony networks would be useful for customers. Within an IP telephony system there are opportunities for far more complex services than are available with current technology, identifying these will be key to the future sales of the system. My research into service creation for SIP systems will also continue, we should have a concrete idea of the form the project will take by the next LMC.

I am also actively looking for opportunities to further practice my management skills, and expand my knowledge in areas not directly relating to the project.

Author: Colin Cameron, Nov/2003