UG405 information up-date

The production and subsequent availability of a UTMC standard has been a goal of DfT, manufacturers and local authorities for a number of years. This clearly relies on the willingness of suppliers to manufacture enhanced products, although there will obviously be development costs associated, and not unreasonably suppliers will want some confidence that these costs will be recouped through sales. Moreover, opinions are likely to differ on the best way to implement the standard, and if each supplier's development work is not coordinated, then the interoperability that is one of the goals of UTMC is unlikely to be met.

UTC is a pertinent example of this. During the early demonstrator projects, the two main UTC system suppliers (Peek and Siemens) each developed a MIB to provide connectivity between their UTC instation, and the outstation devices on street. The two companies have followed slightly different approaches in this development, and as a result the two MIBs did not provide true interoperability. Part of this is due to the different functionality and applications available in UTC systems that have been operating for many years, and which have gone through a number of enhancements, each one widening the gap between the different systems.

Both systems have their merits. Siemens and Peek have both been involved in UTMC from its original inception, and the differences in their implementation of UTMC can be traced back to the early stages of UTMC29, when two parallel approaches were developed that reflected differing views and needs of various UTMC customers.

The main objective of the UG405 project was to evaluate options for lower cost communications for UTC systems. One of the recommendations was for a new communications protocol, and the project was extended to investigate this. However, an alternative protocol was seen as contrary to the standardisation aim of UTMC, and was dropped in favour of harmonising the two MIBS. The time was right for this as both Peek and Siemens would be undertaking some development work to implement SCOOT MC3, although there was a strong desire to build on the existing MIBs to minimise the amount of redevelopment, particularly as these MIBS had been developed in UTMC demonstrator projects, and were still considered valid.

The design proposed employed a split server / client implementation of SNMP whereby the original demonstrator MIBs were incorporated, and through use of a soft switch, the appropriate combination of instation / outstation equipment was supported. At the time this was seen as a sensible compromise, with most of the design work already done, and therefore offering a quick implementation. This design work was undertaken jointly between the suppliers, and the UG405 project team during 2006, and an agreement reached on the MIB specification.

Despite this agreement, the jointly developed MIB has not been ratified by the UTMC Development Group (UDG) Specifications and Standards Group (S&SG) as it was perceived to be too much of a compromise, being more a pragmatic work around than a true solution. There were also some conflicting views in the use of SNMP, which although identified and accepted early on in the development process, has resulted in a difference of approach between the two suppliers. There is a recognition that the late identification of this stumbling block has caused difficulties, particularly for

Peek. However, both suppliers remain committed to the goals of UTMC, and are willing to work to develop a single UTC MIB despite the abortive costs incurred to date.

Siemens and Peek met in early May to review the UG405 MIB to assess what scope existed to develop a MIB that would be less of a compromise between the two different approaches. UDG also met in May, and discussed the outcome of the meeting and also the way forward with regard to adopting a revised MIB as a UTMC standard. Siemens and Peek met again at the end of May to review a number of technical issues, and to establish a further series of meetings to conclude this work. While the final outcome cannot be predicted, work is proceeding on defining a new MIB, and it is hoped that a revised MIB will be available in time for the UTMC conference in November.