

A Technical Report
on

Feasibility Study of Development of a Control System
for Digital Switching
การศึกษาความเป็นไปได้ของการพัฒนาระบบควบคุมการสวิตชิง
แบบดิจิทัล

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ABSTRACT



The report describes feasibility of a Control System for Digital Switching and Call Processing Software for TDSS-1R digital public telephone exchange at Department of Electrical Engineering, Faculty of Engineering, (PSU.). The study has been partly supported by the Prince of Songkla University. Architecture of TDSS-1R which has been primarily designed to work as a rural exchange has been described. The system consisted of mainly two levels of processors, namely, Group Processor Module (GPM) and Central Processor (CP). Intel 80x86 base processors were used. The prototype exchange was designed initially to have capacity of 1,000 subscriber lines Software for the system resided in both GPM and CP. Call Processing software in GPM consist mainly of hardware related using hardware coupled software concept. The CP mainly caied out coordination each GPM serves 256 subscribers. The result of the study indicated that it was feasible to develop the system as TDSS-1R.