CORE STUDY FOR ATP - INTERIM REPORT: DECEMBER 1989

In November 1988, a paper was presented to the Railway Executive seeking support for the provision of a system of Automatic Train Protection (ATP) on British Railways. This has resulted in a development programme. It was recognised that a correct and complete requirements specification would be critical to the success of the project and, to ensure this, a structured method of eliciting those requirements would be needed.

It was decided to apply the 'CORE' method, developed by System Designers plc (now SD-Scicon). It is not a complete CORE study of the ATP requirements for national implementation, since these requirements have been influenced by the parallel preparation of a pilot scheme specification. It is expected that considerable non-compliance will be accepted in letting a contract for the pilot scheme and consequent changes to the requirements for a national scheme will result. The objective of this interim report is to present the information gathered so far in an orderly manner so that the study can readily be resumed after the pilot contract has been let.

The Viewpoint Analysis has broadly established the functional requirements of the system, enabling further analysis to bring out greater levels of detail where necessary. It has exposed and helped to resolve, at an early stage, conflicting requirements between the Viewpoints.

The Non Functional Analysis has defined the constraints under which the system must operate to be deemed successful and, when these constraints are applied to transactions which model the behaviour of the system across the Viewpoints, will identify actions and data flows which are vulnerable to these constraints.

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