

Central Parameter File Reference

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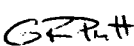
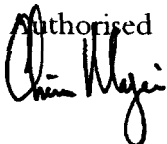
**Published and issued by
Director, Asset Management
Railtrack plc
Railtrack House
Euston Square
LONDON
NW1 2EE**

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Amendment Record

Issue	Date	Description
4	29/10/99	Converted to Word format by AEA Technology Rail. Same as issue 3, except for incorporating the appendix sections 8.1 and 8.2 in issue 3 into the current document as sections 8 and 9. No other changes made.

Author	Approved	Date	Authorised	Date
		29/10/99		12/10/00

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1 Introduction

This document is the reference manual for the Central Parameter File (CPF) and contains the following :-

- the format of the CPF;
- how to test the validity of the CPF;
- CPF syntax description;
- an example of the CPF.

Users of Automated Data Preparation (ADP) tools will find this reference manual useful, since the input file produced by the ADP tools matches the standard CPF syntax.

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2 Assumptions And Restrictions

- 2.1. Examples of input text files appear in bold text.
- 2.2. SSI interlockings exist on the signalling network only, are not duplicated (but have dual PPMs) and are classed as slave subsystems.
- 2.3. SSI interlockings never require RCM or NDS data.
- 2.4. All SSI Identity files for one interlocking have the same file name prefix. For example (prefix underlined in example only):-

CENTRAL.flg
CENTRAL.sig
CENTRAL.rou
- 2.5. The reader of this document is familiar with naming convention used for TD map files generated by the Create or Image utility.
- 2.6. All TD map files for one TD map will have the same file name prefix. For example (prefix underlined in example only) :-

../create/tdmaps/MY01.SA
../create/tdmaps/MY01.DU

The file name prefix entered in the Central Parameter File is used to locate the TD map files by appending the following file name suffixes :-

.SA	for the TD map .SA file; and
.DU	for the TD map .DU file.
- 2.7. It is acceptable for the compiler to operate with command line arguments only.
- 2.8. An IECC can have either an ECS or a PCS, but not both.
- 2.9. The CPF generated by ADP can be manually edited to add subsystems as and when necessary.

3 Overview Of Components

A tool is provided which enables the data preparer to test the consistency of the Central Parameter File. This tool is provided as a single UNIX executable called **cpftest**.

4 File Format

The CPF is made up of two parts, a primary and a secondary file. The primary file contains site dependent data that is required for each new IECC. The secondary file contains data that is site dependent, but is unlikely to be changed for different IECCs.

This section describes the CPF format and the effect of the various data fields on subsystem operation. The syntax is described in English, but for a more rigorous description of the CPF syntax, refer to section 9. An example of a CPF - primary and secondary can be found in section 8.

4.1 PRIMARY CPF

The data in the primary CPF is concerned with the subsystems that make up the IECC and its TD maps. There are several items of data delimited by curly brackets for each individual subsystem.

The primary CPF is described below. Each statement is accompanied with an example of the input, and a description of its meaning.

Data is presented in sets which correspond to the type of the subsystem or the TD map. Each set has one heading, and is followed by zero or more entries of that set type, each delimited with curly brackets. If any data set has no entries, for example if there is no PCS, then the set type statement is present but will not be followed by any blocks of data e.g.

PCS:

All possible IECC subsystems are included even if they do not exist for a given IECC site.

4.1.1 IECC Name

The **IECC:** statement must be the first entry in the file. The **NAME** is the four character name used by the signaller to refer to the IECC area e.g.

IECC: {MRSY}

Thereafter, subsystem and TD Map entries in the CPF must be in a given order to be valid. The order is :-

ARS, GWS, ISM, SDS (for DIS, RDF or SDS), FB, TTP, PCS, ECS, IS, IGS, SIM, RII, SSI and finally TD Maps.

4.1.2 General IECC Data

Subsystems falling into this category are ARS, DIS (RDF or SDS - all known as SDS), FB, GWS, IGS, ISM, RII, SIM and TTP.

Several of the headings can have a number of subsystem entries per IECC :-

DIS, RDF or SDS	maximum 3 (in combination)
FB	maximum 16
IS	maximum 8
PCS	maximum 16
RII	maximum 12

All other subsystems of a maximum of one per IECC.

The entries are presented in subsystem identity order e.g.

SDS:	{NORTHERN	W1	SIG	DUP	BOTH	FULL	-	}
	{WIRRAL	W2	SIG	DUP	BOTH	FULL	-	}

The syntax of each entry for each subsystem is as follows :-

TYP: {NAME ID NET UNIT SER RESP CLU }
{NAME etc. for other subsystems of same TYP }

where :-

TYP: is the type of subsystem e.g. ARS, GWS etc.

NAME is the logical name by which this subsystem is referred to.

ID is the subsystem's identity internal to the IECC. These must not be within the range 00-FF, which is reserved for SSIs.

NET is (are) the network(s) the subsystem is connected to:
SIG is for the signalling network;
INF is for the information network; and
BOTH is for both the signalling and information networks.

UNIT determines the number of computer units making up the subsystem:
SING is for a single computer unit; and
DUP is for a duplicated computer unit.

SER determines what services reside on the NDS board:
NDS is for network communications and duplication services,
RCM is for remote communications monitoring services; and
BOTH is for both the services above.

RESP determines the responsiveness of the subsystem i.e. how much information can be returned to the ISM:
FULL is where RCM is running and will return full status messages;
PART is where RCM is not running but a subsystem application will return a response message to the ISM containing a status byte; and
NONE is where the subsystem cannot respond to the ISM.

CLU is the logical name of a clustered computer unit on which this subsystem is situated, if any (see below).

Note Clustering is where a number of subsystems share a single computer unit. A clustered computer unit is given a logical name which is chosen from one of those subsystems which are clustered together. The name chosen is purely arbitrary and is known as the 'cluster master'. All other subsystems which share the computer unit are known as 'cluster members'. If a subsystem does not appear on a cluster then a **hyphen** must be entered in the field.

4.1.3 ECS, PCS and IS Data

ECS, PCS and IS are grouped together because they require the logical name(s) of the adjacent signal box area(s) with which they communicate and other information in addition to the general data required for other IECC subsystems.

PCSs are normally clustered together in one subsystem whereas, with only one ECS subsystem available per IECC, all PCSs within an IECC are controlled from it. IS subsystems are normally unclustered.

Three further fields are required over and above the seven already identified for the general IECC data. These are placed at the end of each entry (fields 8, 9 and 10) and are in the following order :-

ADJ is (are) adjacent area name(s) i.e. four character name(s) used by the signaller when referring to adjacent signalling areas. Note within a clustered subsystem, there is one adjacent area name for each entry. However, for the ECS, which is unclustered, there can be up to 16 adjacent area names, each separated by **comma**, for all those controlled by the ECS.

UPD is the logical subsystem name from which TD map updates are received for this entry. For a given PCS entry. If TD map updates are received from the area defined in the entry's logical subsystem name, this field is **hyphen**.