

THE NEA FEP DATABASE ELECTRONIC VERSION 1.1

User Notes

1. Introduction

This document describes the NEA FEP Database Electronic Version 1.1 which has been prepared to accompany the NEA FEP Working Group Report. Version 1.1 is produced as a “run-time” solution, i.e. it consists of a customised version of the FileMaker Pro software, produced under license from FileMaker Pro Inc., plus the data files.

The software is Year 2000 compliant.

2. Use

2.1 Getting Started

Please read the “NEAFEP” Software License (appended). The database can be used directly from the CD-ROM supplied. Alternatively, the software may be copied onto a hard disc, subject to the terms of the License. The CD-ROM includes separate versions of the database for use on IBM compatible PC and Macintosh computers. If you copy the IBM PC version to hard disc, you should unprotect the files “INTFEP” and “PROFEP” before using the software, otherwise sort functions will not work. This step is not necessary for the Macintosh version.

Run the application NEAFEP.exe (PC) or NEAFEP 1.1 (Mac). This will call the various data files as required. It is intended that the Database can be used without formal documentation and without prior knowledge of the nature of the Database. All operations are performed via on-screen buttons. “Advice” is given on most of the screens. Information screens describe the principle of the NEA FEP Database and how it is organised.

The software display screens have all been sized at 640x480 pixels. This should display filling the screen on typically configured low-end monitors, and with a black surround on higher resolution monitors. If you find the display screens appear very small, then you can improve readability by setting your monitor resolution (in operating system settings) to a lower size before beginning a NEAFEP session.

2.2 Organisation

“NEAFEP” calls the following data files:

- MASTER - introductory screens and main menu,
- DBINFO - information about the Database including the concept and definition of FEP categories of the International FEP List,
- PRINFO - information about the project FEP databases included,
- INTFEP - the International FEP List and glossary descriptions of each FEP,
- PROFEP - project specific FEP records, including descriptions as provided by each project,
- MAPPING - connection between international FEPs (IFEPs) and project-specific FEPs (PFEPs),
- REFERS - literature references to PFEPs provided by the projects.

Figure A.1 shows a map of the files and screens that can be accessed via the screen buttons.

The records in the PRINFO file describe the 8 databases included in the NEA FEP Database, ordered chronologically. In the PROFEP file, if sorted numerically, the FEP records are displayed in groups corresponding to the projects. It is useful to familiarise yourself with the project reference letters in order to identify from which project a particular PFEP originates, e.g. ‘J’ indicates a FEP from the Joint SKI/SKB database.

2.3 Statistics

Figure A.2 shows statistics for Version 1.1 including the list of the projects.

Figure A.3 shows the distribution of project-specific FEPs (PFEPs) across the categories of the International FEP List (IFEPs).

3. On-screen buttons

Most of the on-screen buttons that appear in the software are intuitively named and their actions are obvious. For example buttons marked “Go Back” will always return you to the previous screen, and those marked “Continue” will allow you to proceed through information in an orderly fashion. Some buttons that may need a little extra explanation are listed below.

3.1 “Switch”

In some of the files (INTFEP and PROFEP) two modes of displaying records are possible. Either individual records (including FEP name, number, description and reference) can be displayed one at a time, or records can be listed several at a time, showing only the FEP name and reference number. The “Switch” button alternates between these two display modes.

3.2 “Search”

You can search the PRINFO, INTFEP and PROFEP files, by clicking on the “Search” button from the relevant screen. This will access the search screen layout for the file. Various search fields will be available.

On the search screen, text can be inserted into any of the displayed fields. The search is executed by clicking the “Perform Search” button on files that use only one display format (PRINFO), or by choosing the display format by clicking either the “Display as List” or “Display by Record” button on files that use more than one display format (INTFEP and PROFEP). Searches are not case-dependent.

If more than one text string is entered into a single field, a logical AND search is performed. For example if the user enters “container corrosion” (without the “ ”) into the “FEP Name” field in PROFEP, then a search is performed for record names containing both “container” and “corrosion”. Similarly, text can be entered into more than one field. For example, in PROFEP, if “container corrosion” is entered into the FEP name field and “sorption” is entered into the FEP description field, then a search is performed for records with names containing “container” and “corrosion” and description containing “sorption”. In the current version of the software, it is not possible to perform a logical OR type search.

Use a systematic approach to searching rather than perform literal text searches. For example, it may be better to search for “chem” which will find “chemistry”, “chemical”, “chemicals”, “chemotoxic”, etc. This search will not find “geochemistry”, the search text always comprises the beginning of a word. However entering “*“chem”” (including the interior “s, in fact *”chem” or *”chem) will find all records that contain “chem” in the given field, including “geochemistry”.

3.3 “Print” and “Mapping”

These buttons are disabled in Version 1.1.

3 Limitations, known problems and comments

Version 1.1 is intended for use only as an electronic reference. It does not permit printing of records or lists of records, nor does it show the mapping by which each PFEP is mapped to selected IFEPs. These facilities are available in Version 1.2 which is a Version developed for use by the NEA FEP Database Core Group, see below.

There are a small number known problems with the Database. Problems most likely to be observed by users are as follows:

1. All display screens and most data fields use the Arial font. If this font is not present on the user’s computer, a substitute font will be chosen. This may cause spilling of text beyond its expected position on some screens. If a data field is affected you can see any

hidden text by clicking on the field.

2. Loss of special font information can occur during transfer of the electronic data between different computers. Possible information loss can take the following forms:
 - Superscript / subscript font information can be lost, with intended superscripted / subscripted text appearing as normal text. For example 10^4 can appear as 104 and H_2O can appear as H2O.
 - Some records in the Database require special fonts to be correctly displayed. If these fonts are not present on the user's computer, a substitute font will be chosen. Such problems typically occur with special symbol fonts used to represent units and mathematical symbols, e.g. $15^{\circ}C$ may appear as 15°C, 15♣C, 15 C, ...
3. If the database is used directly from the CD-ROM then the FEP list Alphabetical Sort option will not work.

Users are welcome to send comments, especially to report any errors/problems encountered and to make suggestions for improvements to future versions. Please submit any such comments by e-mail using the standard form provided in "Comment.doc".

4 Disclaimer and more information

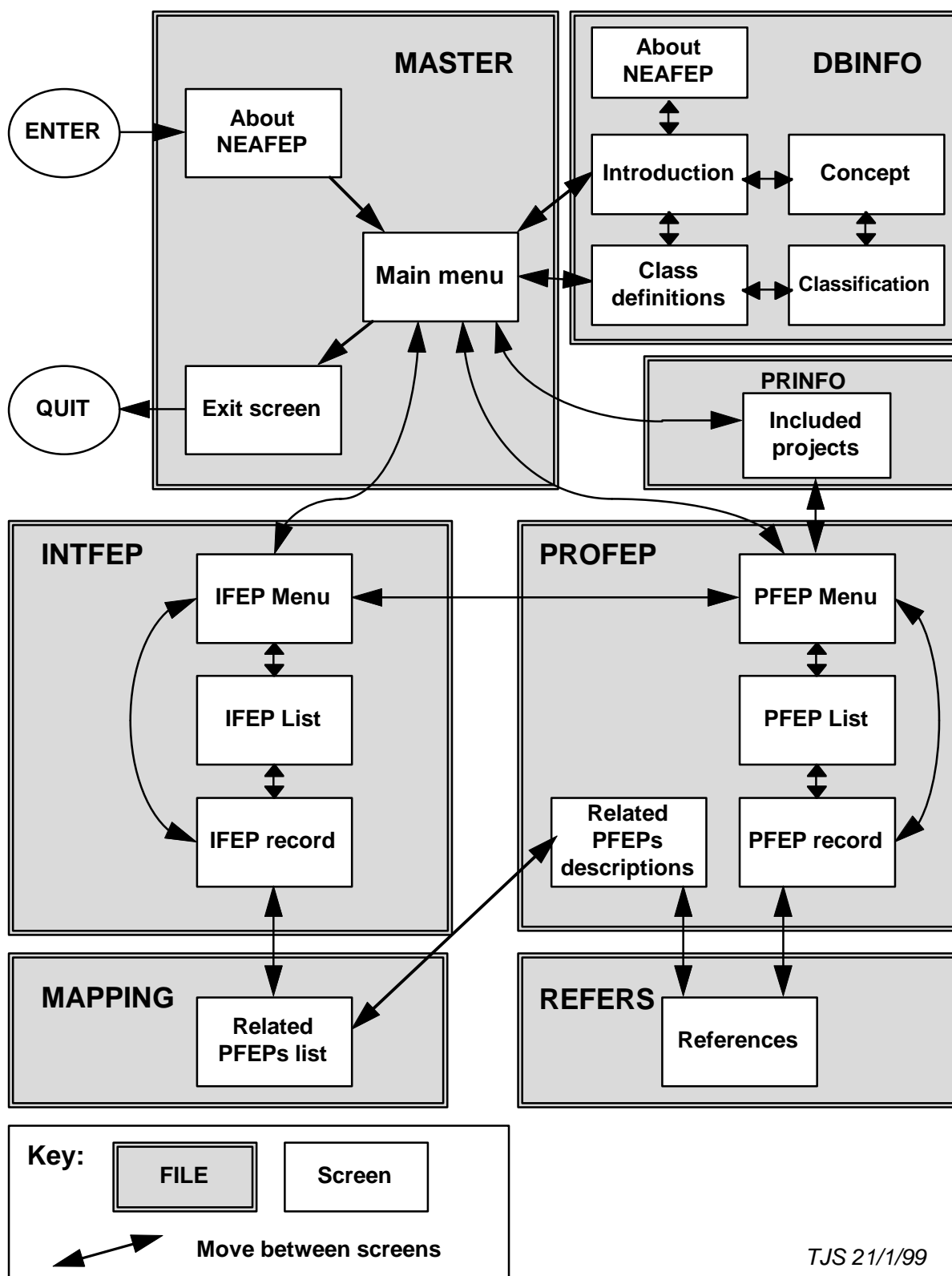
The NEA FEP Database Electronic Version 1.1 was developed on behalf of the Nuclear Energy Agency by Safety Assessment Management Ltd. It was developed to accompany the NEA FEP Working Group Report and is provided to illustrate the potential capability of an electronic database of FEPs. Neither the NEA nor Safety Assessment Management Ltd. undertake to give technical support to users of Version 1.1, and neither organisation takes any responsibility whatsoever for the use of the database or any losses or damage incurred due its use. Comments on the database and software are welcomed, however, see above, and simple queries may be answered by e-mail.

A group of organisations from various OECD countries have formed a "Core Group" with the objective of maintaining and developing the Database, sharing experiences in the use of FEP databases and raising the funding for technical work on the NEA FEP Database. For more information on the NEA FEP Database Core Group, please contact:

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Figure A.1: NEA FEP Database (Version 1.1) - Screen Map



Note: For simplicity, some screens are not shown, e.g. those related to Search facilities

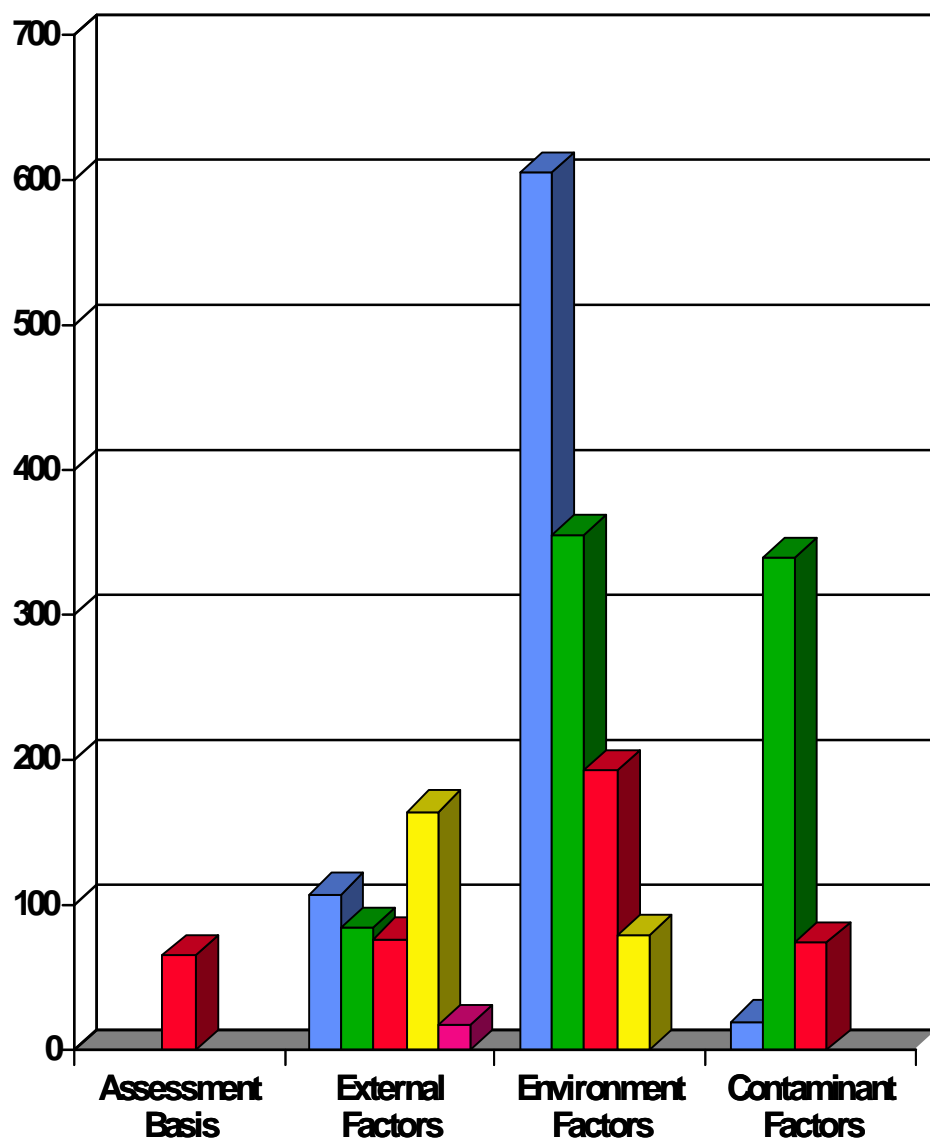
Figure A.2: NEA FEP Database - Statistics for Version 1.1

- 150 “International FEPs”
- Incorporates 8 projects and with over 1400 project-specific FEPs

Project	No. FEPs	No. refs.	No. maps
SKIB89 (Andersson (ed.) 1989)	158	-	249
NEA92 (NEA SWG 1992)	146	-	190
HMIP93 (Miller & Chapman 1993)	79	-	125
AECL94 (Goodwin et al.1994)	281	91	459
KRIS94 (Nagra 1994)	258	152	358
SITE94 (SKI 1996)	106	52	211
WIPP96 (USDOE 1996)	246	141	384
IRUS97 (Stephens et al. 1997)	144	91	213
Total	1,418	535	2190

Note: the number of maps is the number of binary matches between an IFEP and a PFEP.

Figure A.3: NEA FEP Database - Distribution of PFEPs over IFEP classes



APPENDIX 1:

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APPENDIX 2:

History

Version 1.0 of the NEA FEP Database was a product of the NEA Working Group which operated between 1993 and 1997, see the NEA Working Group Report.

Version 1.0 was implemented on FileMaker Pro 3.0 and circulated for review and private use to members of the Working Group.

Version 1.1 has the following changes relative to Version 1.0:

- Broken references and links identified by users of Version 1.0 have been fixed.
- Kristallin-I and WIPP 96 databases have been re-entered. (There were some minor errors in the WIPP data used in Version 1.0 and the Kristallin-I database has been finalised with minor changes since the production of Version 1.0).
- An additional project database, the AECL IRUS database has been added.
- A search option has been added to the project, project FEP and international FEP databases, allowing the user to search on all relevant record fields.
- The database has been “colour coded”, in an attempt to improve usability.
- Some cosmetic changes have been made as a result of Working Group and independent review comments.
- Improvements have been made to the database screens so that most operations that a user will require can be made by the use of on-screen buttons. Thus the FileMaker Pro menu bars and commands can be dispensed with.
- On-screen advice and user documentation has been updated to reflect changes.
- Version 1.1 is implemented on FileMaker Pro 4.0 datafiles and compiled as a “runtime” solution in PC and Macintosh formats.

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