

Minimum configuration:  
PC Pentium™ (32 Mb RAM, 64 Mb recommended)  
Windows NT 4.0 or Windows 95/98  
Recommended minimum screen resolution: 1024 by 768 pixels, 256 colours

Upgrades of DEMETRA can be found in Eurostat's "Interest Group for Seasonal Adjustment Methods":

<http://forum.europa.eu.int/Public/irc/dsis/eurosam/library>

All feedback and questions are welcome on the "DEMETRA-Help-Desk":

<http://forum.europa.eu.int/Public/irc/dsis/eurosam/newsgroups>

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**DEMETRA** Version 1.4  
release

# SET-UP

Former versions of Demetra should be removed before installation. Insert the CD-ROM in its driver. Open your file explorer and visualise the contents of the CD-ROM. Go to the sub-directory "Demetra". Then click on the **Demetra14\_Install.exe** icon and follow the instructions on the screen.

You can already use Demetra for treating time series from formatted ASCII files or MS-EXCEL files (if MS-EXCEL is installed). If you want to access time series in Fame databases, please refer to the more detailed installation instructions on the CD-ROM (e.g. click on the **install14.txt** icon)

For detailed user help and for the preparing of the input data in the ASCII and MS-EXCEL files click on the **Demetra.hlp** icon in the home directory of Demetra or type the key "F1" at anytime while you run DEMETRA.

# SHORT DESCRIPTION

Demetra is an interface to the seasonal adjustment methods Tramo/Seats and X-12-Arima. It eases the access of non-specialists to these methods and improves largely their user-friendliness. However, it does more than providing convenient dialog boxes for the input of the parameters and for some output.

Demetra consists of two modules. One is a powerful tool for statistical production in a large-scale environment imposing a recognised seasonal adjustment policy. Furthermore, it automatically finds difficult time series in huge data sets and assists the user in their treatment. The second module allows detailed analysis on single time series of special interest. Several time series models can statistically and graphically be compared.

Demetra only uses the statistical algorithms included in the methods Tramo/Seats and X-12-Arima. It is fully menu-driven and uses general statistical vocabulary (no key words of the primary methods for parameters, models and functions) except for very advanced usage.

The Demetra software is a client-server application. The main programme of Demetra (the client programme) provides the graphical user interface. It runs on Windows NT or Windows 95/98-based PC's, and gives access to time series in formatted ASCII files or MS-EXCEL files. The server programme "Demetra Fame server" is needed to build the access to FAME databases, and must run on the machines (with Windows NT or UNIX operating system) where the Fame programme and databases are installed.

# HOW TO GET STARTED

To run Demetra, click on the **Demetra** icon in the "Start" menu. By default, Demetra will create a new project. In the Welcome dialog box make your choice for one of the two following modules incorporated into Demetra (or cancel to open an existing project):

- the automated module (e.g. for inexperienced users or for statistical production) or
- the module for detailed analysis of single time series

Both modules provide access to time series data in formatted ASCII files, MS-EXCEL files or Fame databases (only if MS-EXCEL respectively Fame is already installed) and to the methods Tramo/Seats and X-12-Arima.

# CONTENTS AND TOOLS

The creation of a new project in the automated module as well as in the detailed analysis module always starts with the dialog boxes for the **selection of the time series**. While in the detailed analysis module only one single time series per project can be chosen, the automated module allows the entering of up to thousands of time series. The Fame namelist object and wildcard specifications ease the selection of large-scale sets of time series. The time series data can be limited to a user-defined time span. To know more about the necessary format of the input data in the ASCII and MS-EXCEL files, type the key "F1" at anytime while you run Demetra or click on the **Demetra.hlp** icon in the home directory of Demetra.

After the selection of the time series, the **detailed analysis** module immediately shows the project main view. If the time series has already been treated with Demetra and a set of modelling parameters has been previously accepted and saved to the database/data file, this model set will automatically be loaded and added to the project. Otherwise, a new model must first manually be added to the project. Use the pull-down menu to access the following tools:

- adding, deleting and saving of sets of parameters (in Demetra called "models")
- changing of parameters for the modelling and statistical treatment of one model
- executing of Tramo/Seats or X-12-Arima on one model
- accepting of one model and saving of the set of parameters and corresponding result time series (like seasonally adjusted or trend series) to the database/data file
- exporting of information on modelling settings and diagnostics of an accepted model to a text file (for filing)
- customisation of the degree of detail of information on modelling settings and diagnostics; customisation of the model acceptance rules
- graphical comparison tool of the result time series
- Demetra user help

At the moment, detailed analysis projects can not be saved and re-opened.

The **automated** module needs after the selection of the time series other information from the user in order to automatically perform the seasonal adjustment:

- choice of one of four statistical tools: new automatic processing, new customised processing, processing of a previously accepted and saved set of parameters with or without re-estimation of the ARIMA and regression coefficients
- customisation of the statistical rules for detecting difficult time series
- options for the saving of result time series (series type and saving place)
- only for a new processing: choice of method (Tramo/Seats or X-12-Arima), choice of type of trading day effect to test
- only for a new customised processing: choice of most important parameters for the modelling and statistical treatment

The complete set of time series is processed in once. The modelling parameters and corresponding result time series (like seasonally adjusted or trend series) of all time series with acceptable diagnostic statistics are immediately saved to the database/data file. After the processing, the list of automatically accepted and difficult time series is displayed in the dialog box "Status of the Project". Use the buttons in this dialog box to access the following tools:

- assisted treatment of difficult time series: adding and processing of up to 2 alternative (mostly automatic) models; accepting of one model and saving of the set of parameters and corresponding result time series (like seasonally adjusted or trend series) to the database/data file; Demetra user help
- exporting information on modelling settings and diagnostics of the accepted or the first models to a text file (for filing)
- restarting the seasonal adjustments (after a time series update) and saving the project