V E G A

www.vegachess.com

Chess Pairing Software

FIDE approved:
Torino 2006: Dubov system
Istanbul 2012, Goynuk 2017: Dutch system

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User´s Manual
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1. Overview and Main Recommendations

Vega consists of two programs for the administration of a chess tournaments; Vega for individual tournaments and VegaTeam for team tournaments. Vega has been designed in a way that reflects, as closely as possible, the tasks of the arbiter or Tournament Director (TD) during a tournament: These include:

1. Registration of players.
2. Pairing the next round.
3. Entering results for the current round.
4. Compiling the cross-table and other lists for display to the players.

During these steps some additional tasks are allowed such as managing withdrawals, printing positions, data correction, etc… Vega monitors the user's activities and only offers permitted functions at the proper time.

Vega includes the following functions:

- Registration of up to 1200 players and the evaluation of 23 rounds for the Swiss system or registration of up to 99 teams of 10 players each and the evaluation of 14 rounds. These limits can be changed.
- Registration of up to 24 players/teams for the round-robin system single and double.
- Automatic pairing according to the Swiss system: **FIDE Dubov, FIDE Burstein**, **FIDE Dutch** (systems provided by JaVaFo engine © Roberto Ricca *certified by FIDE*), **FIDE Lim**, **Swiss USCF**.
- Manual pairing.
- Manual improvements to pairings.
- Management of odd numbers of players.
- Evaluation of results (1-0, 1/2, 0-1, 0-0, forfeited, adjourned games, etc...).
- Administration of the cross-table.
- Facility to change data (results, names, ratings etc.).
- The import of players from any formatted database.
- The export of players or an entire tournament.
- Management of withdrawals and re-entries.
- Entry of players arriving late during the tournament.
- Output of pairing lists, reports, cross-tables, lists of players standings, etc…
- Generates web content of the tournament results.
- Prize distribution according to the Hort system.
- Accelerated rounds: FIDE Baku system, custom up to three groups and Progressive acceleration.
- Run under Windows, Linux and Mac OS X.

By default Vega works implicitly in FIDE mode, i.e. it allows practice approved by FIDE. If the user activates some option deprecated by FIDE Vega will emit an appropriate warning.

Although Vega has been designed to be very intuitive and easy to use, it is recommended that the user reads this manual and tries to simulate a few tournaments in order to learn all of its functions. The user must have some knowledge of the rules of the Swiss system and its implementation in Vega in order to properly manage pairing. There are occasions when manual pairing is required. The Vega web site contains some screencast demonstrating specific tasks.

1.1 Document Conventions

Graphical labels referred to in the text are marked using **bold text**.
Transition during menu navigation is marked using an arrow: **File → Exit**
Parameters to be substituted by the user are marked with <angled-brackets>.

1.2 System Requirements

Vega runs on Mac OS X (Mojave), Linux, Windows operating systems from Windows XP onwards fitted with a hard disk and a graphic card capable of supporting a resolution of 800x600.

A printer is recommended for the display of pairings and results during tournaments, although in principle Vega could be used without it. Vega will print only ASCII files. HTML output can be printed from the browser, but there is little control over page breaks.
Vega may run even on a USB pen drive.

1.3 Installation

Windows version: Vega comes in the self-extracting archive `VegaSetup.exe`. To install the program just double click on the icon program and follow the instructions. Please do not install the program in the folders "Desktop" or "Documents", instead use the usual directories of c:\programs\vega, c:\vega, etc... without spaces in the name of the installation folder. After installation, the program can be run from the start menu in the usual way. Please note that:

`Vega.exe`   refers to the version for individual tournament
`VegaTeam.exe`   refers to the version for team tournament

Linux version: Vega comes in the compressed archive vegalinux.tar.gz. To install the program, the user should create an installation directory and then extract the contents of the archive using "`tar xvf vegalinux.tar.gz`". VEGA will be installed in the directory vegalinux. To run the program the user must change directory and enter the following command:

`./Vega`   for individual tournament
`./VegaTeam`   for team tournament

In some distribution could be necessary to install some missing library.

MacOSX version: Vega comes in a dmg archive. Install it as usual moving the package in the Installation folder.

Customizing the Menus

By default, Vega shows the menu in English. The user can select a different language using **Select Language** under the **Extras** menu. The program will need to be re-started for the changes to take effect. If necessary, the user can customize Vega's text labels by editing the message catalog as described in Appendix A (Frequently Asked Questions).

Uninstalling Vega

To uninstall the program, just run the uninstaller from the start menu. On Linux, simply erase the installation directory. On MacOSX simply remove the program from the Application folder.

Reporting Bugs

The author will appreciate all comments, questions and bug reports (if any). To report a bug, send details to the contact address below. Attaching the zipped tournament folder will assist analysis.

E-mail: vega@vegachess.com

License

The user will find the program license in the installation directory (see Appendix B). The user must be aware that by using the program, he accepts all the terms of the license.

2. Vega for Individual Tournaments

In this tutorial the user will learn how to start a tournament, produce pairings, insert results and show the cross-table in the standard way (Sections 2.1 to 2.6). Section 2.7 describes some tasks such as modifying the tournament details that are sometimes necessary. Sections 2.8 – 2.10 describe the **Standings, Extras and Rating Report** menu items. Miscellaneous other tasks are covered in section 2.11.

The working area of Vega consists of a **menu bar**, 3 tabbed pages (**Players Archive, Round Manager, Output**), and a **status bar and database area**.

When the program starts, the page titled **Players Archive** is shown:

The **File** menu gives access to a series of operations including the opening and closing of files, the creation or modification of a tournament and exiting from the program. The three tabbed pages refer to three functions that the arbiter can perform during a tournament.

1. **Players Archive**: here it is possible to register players, close the registration and start the tournament, modify player details even after the tournament has started, manage withdrawals and late entries and print the list of players.

2. **Round Manager**: here it is possible to generate and modify pairings for the next round,

insert the results of the current round or revisit and correct previous rounds.

3. **Output**: here it is possible to visualize and print all the outputs from the program

Continuing the exploration of the Players page, we find the panel **Registered Players** in which the player data (name, Elo, etc ...) are entered, which ends with a summary of the registered players: T = total number of registered players, P = number of players present on the next round, B = players taking ½ of BYE on the next round, A = players absent on the next round.

At the bottom of the players page is the Status Bar which provides valuable information on the status of the tournament and suggests what to do. So you don't have to remember where you were the last time you turned off the computer, but Vega will assist you during the tournament.

To quit the working session, the user should select **Exit** from the **File** menu. To resume an old session, select **Open Tournament** from the **File** menu and look for files with a *.vegx extension in the working directory.

2.1 Creating a New Tournament

To create a new tournament, select **New Tournament** from the **File** menu. A new form will prompt the user to enter essential information required for the tournament (see illustration below) in two distinct pages: **Tournament definition**, **Tie Breaks**.

The field **Federation** must contain the FIDE country code (3 characters). This information is important as it determines the national rating system and in the case of FIDE ratings, it affects the international norms.

Please note that the **Rounds** variable will have no effect on Round-Robin systems, since they are managed automatically by Vega.

The button **Set schedule** enables the user to enter time and date of each round. This info, if available, will be shown on the FIDE rating report and printed on the pairing sheet and web site as well. To enter the schedule, make a mouse right click and choose the desired action.

The **Play System** drop-down menu enables selection from several pairing system. For a brief guide on which Swiss system to use, see Appendix A: Frequently Asked Questions.
While a tournament is running Vega will permit the switch among Swiss systems. However the change of play system is forbidden by FIDE and Vega will prompt the user with a warning. So the switch of a Swiss play system in a running tournament should be limited to some rare and very special situation.

> *NOTE: Pairings for the **Swiss system FIDE Dutch, Dubov and Burstein** are performed thanks to the pairing engine JaVaFo © Roberto Ricca (http://www.rrweb.org/javafo). JaVaFo needs the Java Runtime Environment (JRE) at least version 7. The JRE can be downloaded from http://www.java.com (you may need to have the privilege of administrator to install it). Please download and install the 64 bit version if you are using Vega 64 bit version, otherwise download and install the 32 bit version if you are using Vega 32 bit version.*

Initial ranking list sorted by: Vega permits to assign a pairing number to each player in six ways:
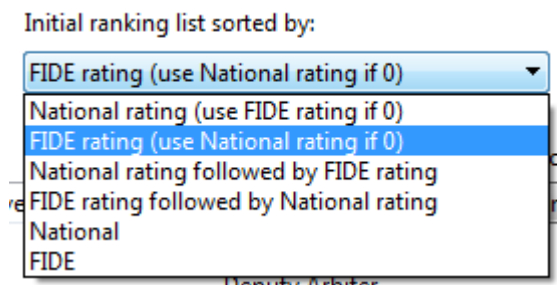
1. **National rating (use FIDE rating if 0)**: The National rating will be used as the principal one. If the player is National unrated (Rtg Nat = 0), Vega will use his FIDE rating.
2. **FIDE rating (use National rating if 0)** (default): The FIDE Rating will be used as the principal

one. If the player is FIDE unrated (Rtg FIDE = 0), Vega will use his National rating.

3. **National rating followed by FIDE rating**: The National rating will be used as the principal one. In case the players have the same National rating Vega will rank them according their FIDE rating.

4. **FIDE rating followed by National rating**: The FIDE rating will be used as the principal one. In case the players have the same FIDE rating Vega will rank them according their National rating.

5. **National**: Only National rating will be used as the principal one and the FIDE rating will be neglected.

6. **FIDE**: Only FIDE rating will be used as the principal one and the National rating will be neglected.

If the user prefers to run a tournament with accelerated rounds, then he can click the drop box **Accelerated rounds** and select the **FIDE system** that is automatically managed by Vega (see Baku system https://www.fide.com/fide/handbook.html?id=204&view=article).

Alternatively, the user can select a **custom** accelerated system. In this last case, before to close the registration, Vega will prompt for the required parameters.

Vega uses a working directory <TournamentFolder> in which it will store all the files generated during the tournament. Each tournament has its own working directory, if a tournament has many sections, then each of them should have its own directory. This directory is set by pressing the **set folder** button (see next picture).

> *NOTE*: **It is recommended to avoid** accented and unusual characters (such as éçòà°@"#...) when inserting data in the tournament definition window. In fact, these characters collide with external program used in conjunction with Vega. For example, the file containing the games (PGN files) cannot be read by some software in case contain those unusual characters.

> *NOTE: The tournament folder should **NOT** be created in the installation folder, but in some area of the hard disk that any user may access, for example,* `c:\mytournaments.` *Depending on your computer you may need the rights of administrator to create it and make it writable by all users.*

Once the **New Tournament** form has been filled in, the user must click on **Done**. To correct these settings later on, select **Dangerous Stuff! →Modify Tournament** from the **File** menu.
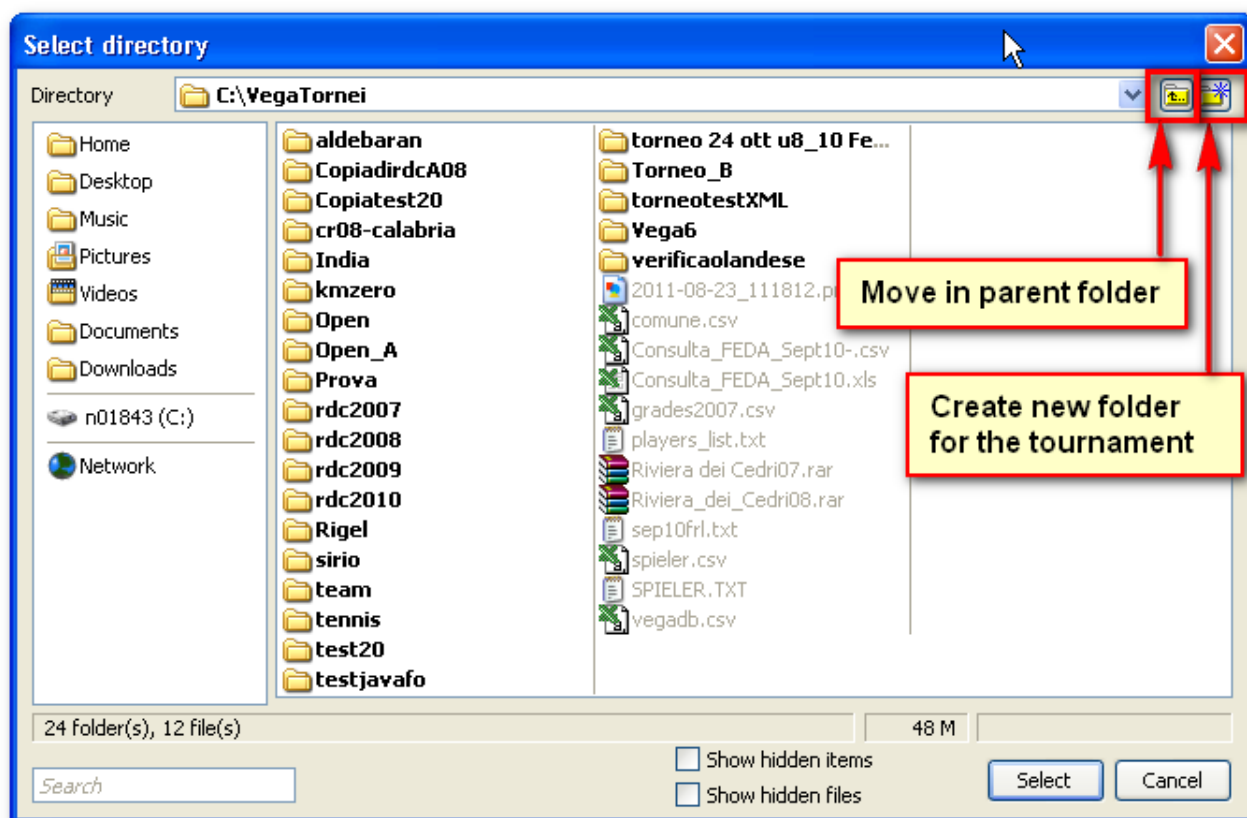
In the page **Tie Breaks** the user can choose among different tie-breaks.

- *Buchholz Cut 1* is the Buchholz score reduced by the worst opponent score
- *Buchholz Total* is the Buchholz (sum of opponents) score
- *Buchholz Median* is the Buchholz score reduced by the best and worst opponents scores
- *Sonneborn-Berger* is the sum of defeated opponents scores plus half the sum of opponents score with whom the player has drawn
- *Cumulative* is the sum of progressive scores
- *Average Rating Opp.* is the average Elo rating of opponents. Only real games are counted. Moreover, in case of player with rating equal 0, a Rating floor of 1000 is used (FIDE Arbiters Manual).
- *Koya:* is the sum of points obtained against opponents who have scored at least 50%,
- *Most Wins*
- *Av. Per. Rat. Opp.* is the average performance rating of opponents (only real games are counted and for opponents and players with at least 2/3 of the planned rounds).
- *Av. Rat. Opp. Cut 1 as Average Rating Opp.* after discounting the worst rated opponent.
- *Direct Encounter, DE1 (all play all)*: Results of direct encounters between the tied players. This tie break applies only if all tied players have played each other.
- *Direct Encounter, DE2 (with missing games)*: Results of direct encounters between the tied players. This tie break applies even if some game is missing among tied players.
- *Most Paired*: counts only the games for which the player was actually paired, including byes, but ignoring any drawn 'forfeits'.
- *Standard Score (*1-1/2-0): The score is determined assigning 1 point for win and ½ point for draw. This tie break is useful if another score system is used (for example 3-1-0).
- *Most Blacks:* counts the games played with Black pieces.
- *Torino* (www.rrweb.org/scacchi/TorinoSystem.pdf) .
- *User Tie Break:* manual tiebreak

To set the *User Tie Break:*
1) select it in the tie break list in any order you like;

2) to set its value the user should click the item menu Standings/Set User Tie-Break
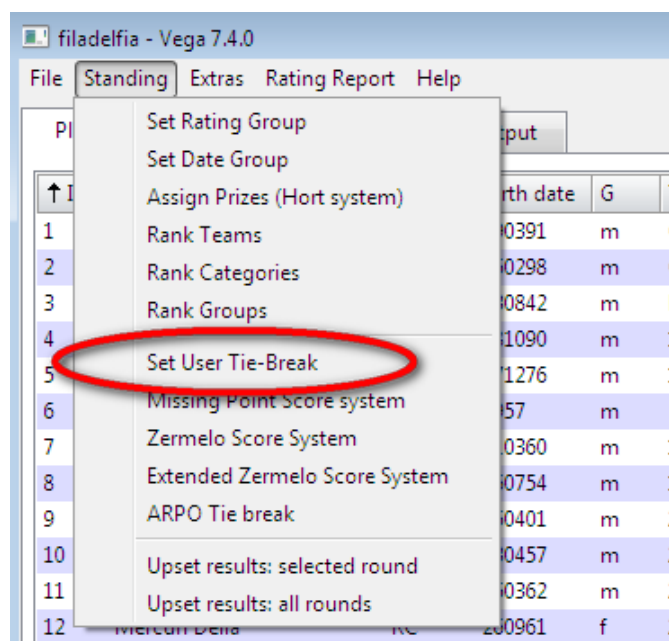
A new panel will prompt the user for the tiebreak values (format xxxx.x). The values are saved in the file usertb.txt. In order to update the standings click **Update Cross Table** button in round

manager page .

3) For all successive rounds Vega will use always the same values. If the user wants to update them then go to step 2).

The implementation of the Buchholz and Sonneborn-Berger system with respect the unplayed games in **swiss** tournament is described in Appendix I.

Moreover, it is possible to exclude from the tie-break calculation any pre-arranged ½ point bye (sometimes referred to as "draw to forfeit") by checking/unchecking the option "**Do not consider Bye Drawer for tie-break**" (This is the default). Another way to prevent the pre-arranged half-point byes being considered is to use as first tie-break the one called "Most paired". This considers only games in which the players were actually paired (including the pairing allocated BYE by the system).

> *NOTE: Vega will list the tied players in ascending order of their pairing number. This order should not be considered an extra tie-break. In order to break the tied players, the user should choose additional criteria.*

2.2 Registering Players

After creating a new tournament, the user must enter player information in the **Players Archive** page. Players are entered clicking **Add Player** and filling out the fields in the Registered Player area**.** (It is also possible to enter players by importing them singly or in groups from a pre-existing database – see Section 2.11.3.)

To accept the data, the user needs to perform a mouse left click outside the inserted record (the red box in the above picture) or press the key ENTER.

While the registration remains unclosed, the selected player can be moved up and down using CTRL + Up and CTRL + Down.

Each registered player receives a temporary pairing number, N, that may change until the registration is closed.

To print the player list just click on

Extras → Print registered players.

The information to be supplied during registration is:

Name: Last and first name for a total of 30 characters.
          *NOTE: Only the **Name** field is mandatory for adding a player.*

Fed: Three characters for the Federation of the player. For FIDE tournaments enter the exact FIDE code, otherwise Vega will not calculate the resulting FIDE norm correctly.

Birthdate: 10 characters (actually it is a string and no preventive control is performed. See Section 2.8 for more details). The user must enter the date of birth in a consistent way with the rating report.

Gender: Choose between 'm'ale and 'f'emale (default = 'm').

Title: Choose one of the listed category. The FIDE titles are: **GM, WGM, IM, WIM, FM, WFM, CM, WCM.** Instead the national categories are**: M (master), CN (candidate master), A=1N, B=2N, C=3N, D, E**. The player without a title/category is denoted by NC or blank.

ID FIDE: FIDE code in 9-digit format (default = 0).

Rtg FIDE: Current FIDE rating of the player (default = 0).

K FIDE: Coefficient for FIDE rating calculations. It is permissible to retain the default value (0) for K. However, FIDE values are:
K = 40 for a player new to the rating list until he has completed events with at least 30 games
K = 20 as long as a player's rating remains under 2400.
K = 10 once a player's published rating has reached 2400 and remains at that level subsequently, even if the rating drops below 2400.
K = 40 for all players until their 18th birthday, as long as their rating remains under 2300.

ID Nat: Player national code in 9 digit format (default = 0).

Rtg Nat: Current national rating of the player (default = 0).

K Nat: Coefficient for national rating calculations (default = the last inserted value).
Vega can be modified in order to meet specific requests from other Federations. In this case please contact the author.

Origin: supplementary field that can contain the player's region, state, province, club name... In

some tournaments this field can be used to get a standings by team (see section 2.7).

Info: supplementary field that can contain the email, hotel, telephone number and so on.

Status: The status of each player can be changed at any time by a right click on the player name and then selecting **Set Player Status**. A new window will open to set status for the remaining rounds.


A player at a given round can be in one of three possible states: **Paired**, "white" color, the player is available to play this round; **Not Paired/Withdrawn**, "red" color - the player is not available for this round; **Byed**, "yellow" color -the player has a pre-arranged draw/BYE. The **Byed** status should assigned to those players that surely does not participate in that round and asked to be awarded of half point according to the tournament rule. All other players that may show up later and may be paired need to be temporarily set as **Not Paired/Withdrawn.** In fact their actual result can be set later at the end of the round.
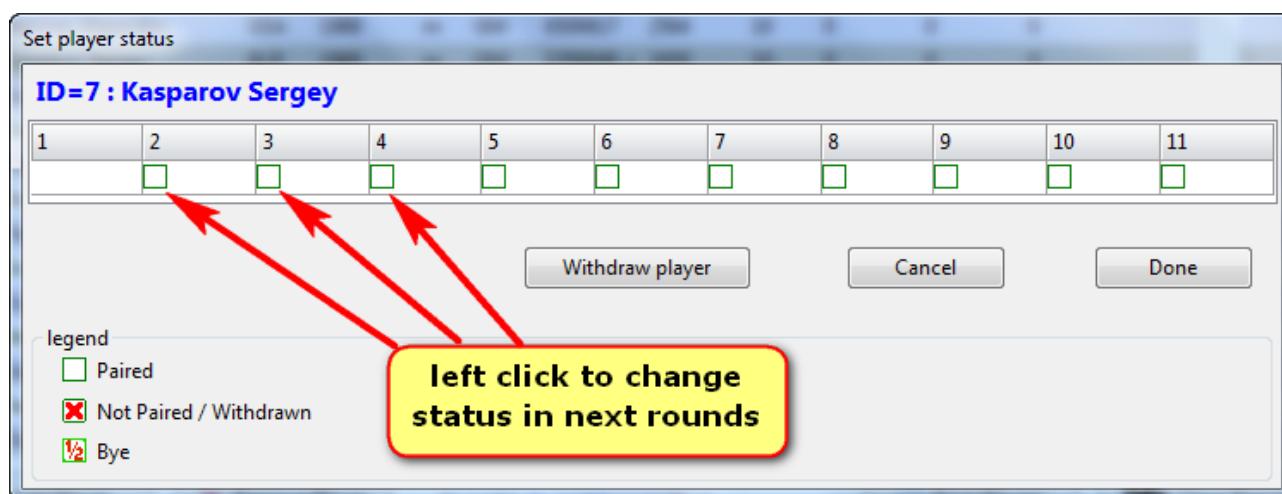
To remove the player from the remaining rounds, press the button **Withdraw player**. To accept the settings press button **Done**.

It is possible to inquire the history status of all players via the menu item **Extra/Show players status.** Moreover, Vega shows a summary towards the bottom of the **Player Archive** page regarding the status of all registered players
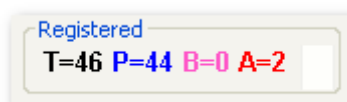
T = total number of registered players; **P** = Playing players in the current round (players appearing in the pairing); **B** = players that got a draw/ BYE; **A** = absent players.

To modify a player already added, the user should right click the wanted player and choose **Edit**. To

accept the modification it is necessary left click the mouse in any place inside the registered player area.

To delete a player the user should:
1. Select the player in the Player list (multiple players can be selected using the **CTRL** and **SHIFT** keys).
2. Press the button **Remove Player**.

The players and tournament data are saved in the file `<TournamentFolder>.veg`.

2.3 Closing the Registration

When the user has finished inserting the players, click the **Close Registration** button to start the tournament. Vega will re-order the list of players according to the play system of the tournament and assign a definitive **pairing number** denoted by **N** to each player.

Once the registration is closed, it is not possible to remove players, only modify existing ones. The user can add *late entrants* by pressing the **Add Player** button (see section 2.11.5 for details).

2.4 New Pairing

The pairing is performed in the **Round Manager** page. The buttons perform the following operations:
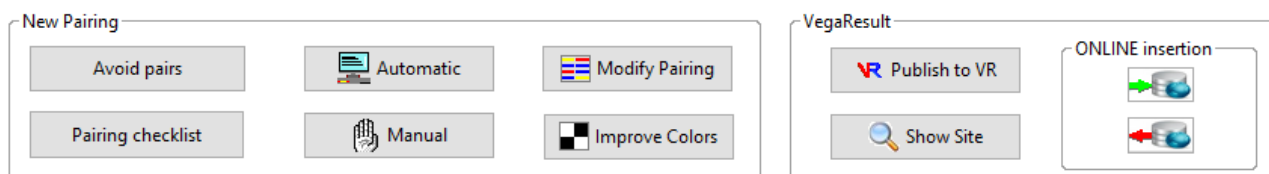
Pairing checklist: save the file `checklist.txt` that may be used as basis for most of Swiss pairing systems. For each player is shown his color history, opponent history, score group, last float, color preference. It is made by the engine JaVaFo and its explanation can be found here http://www.rrweb.org/javafo/aum/JaVaFo2_AUM.htm#_Toc465604123 .

Avoid Pairs: Pressing this button opens a new window in which the user can indicate which pairs should be avoided in the next pairing. For example, the following picture shows a typical setting that avoids pairs among players of the same Origin up to round 3. Also prevented are pairs among players 4, 9, 13, 16.
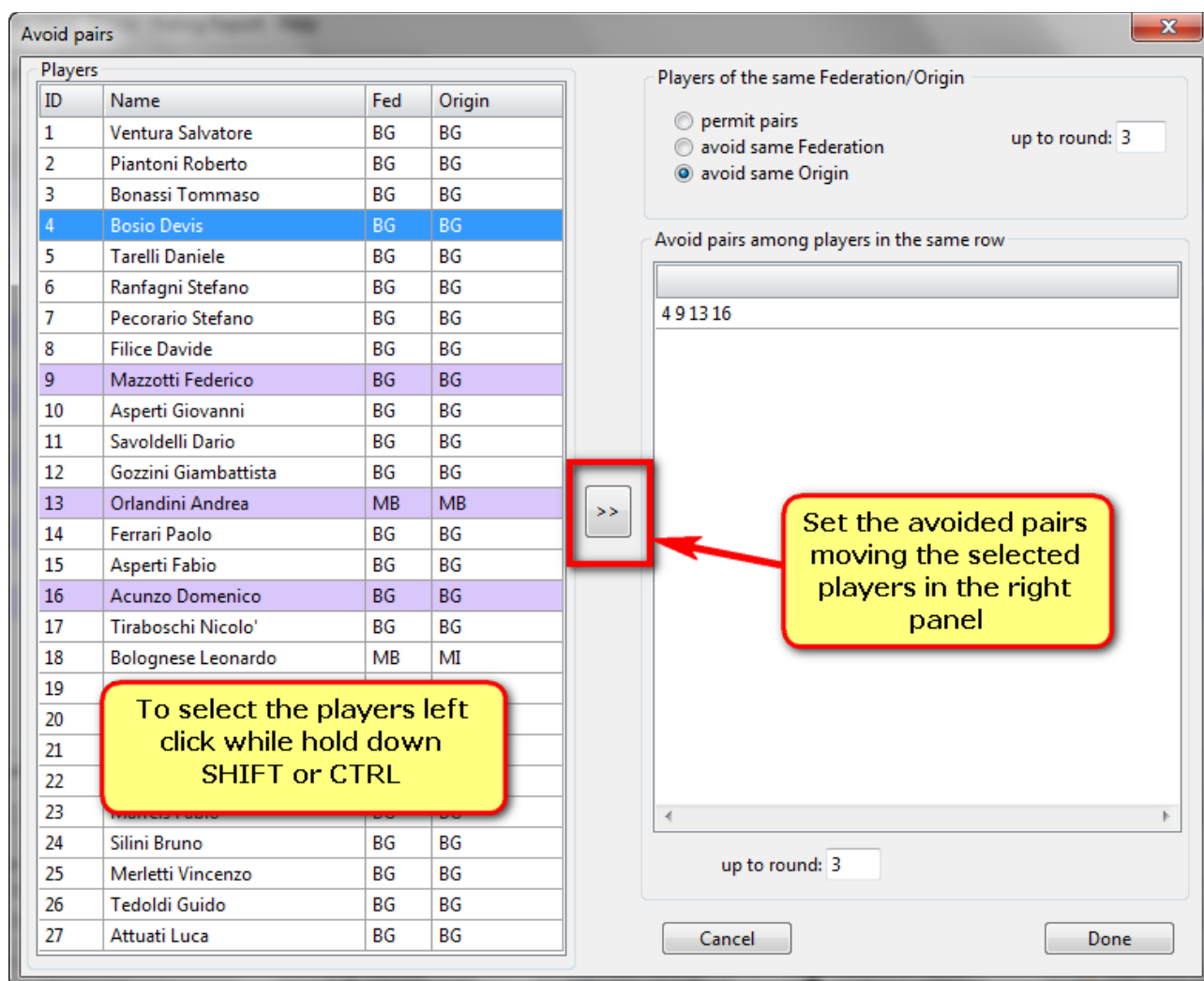
Automatic: Instructs Vega to produce pairings according to the selected pairing system. In the case of an odd number of players, depending on the pairing system, Vega automatically assigns a BYE. The fictitious player is assigned with **N = 0** and a name of **BYE**. The user can exchange the colors of a pair by a double click on the selected pair.

Manual: The user can create their own pairing and Vega will check the legality of each inserted pair. More details about this important function can be found in section 2.9.1.

Improve colors: Permits a quick exchange of colors. See Section 2.11.8 for details.

Modify Pairing: Permits modification of the current pairing. See manual pairing for details.

Publish to VR: Uploads the tournament to the VegaResult site (see chapter 3 for details).

Show Site: Open the browser to show the site published by VegaResult site (see chapter 3 for details).

2.5 Result Entry

The results are entered using the **Insert Result** panel in the **Round Manager** page. It is possible to enter results of the current round or modify those of past rounds. The results are entered by choosing a pair in the pairing list and then clicking on the button corresponding to the result:

585	Azpeitia Santidrian Carlos	0.0	1174	...	781	0.0	Albano Francesco
586	Ramirez Cintia	0.0	782	...	1173	0.0	SangiovanniMarcello Cordeiro
587	GM Vescovi Giovanni	1.0	4	½	0	0.0	(half point bye)
588	GM Rambaldi Francesco	1.0	5	0	0	0.0	(not paired)
589	Walschus,Uwe,Dr.	0.0	1175	0	0	0.0	(not paired)
590	GM Blübaum,Matthias	0.0	1176	0	0	0.0	(not paired)

Insert result

`1−0` `0−1` `½−½` `1F−0` `0−1F` `0F-0F` `? - ?` 🕐 `0 ½ 1` ▦⚡

Show results

Round **2** ⬍ `all` `...`

The 'F' denotes a forfeit. Alternatively, the user can enter the result by pressing the following keys:

1 : 1 - 0,

0 : 0 – 1,

5 : ½ - ½,

3 : 1F – 0F,

4 : 0F – 1F,

2 : 0F – 0F,

7 : adj = adjourned (it is equivalent to ½ - ½ for pairing purpose);

9: delete the current result.

The consequences of a forfeit in Vega are:

1. For the purpose of rating variations, the game is considered as not played for both players (so that they can be paired again in subsequent rounds).
2. The winner will get +1 point.
3. The color for that round is considered NO_COLOR for both players.
4. For tiebreak purposes the forfeit will be handled as specified at the tournament definition.

The pair with the BYE is assigned a N = 0 and the name **BYE**.

> *NOTE: The user can exchange colors of a pair by a double clicking on that pair.*

> *NOTE: To restart entry from the first pair, press the ENTER key.*

A non-standard result, for example ½ - 0, 0 – ½ , 0 – 0, can be assigned using the button **not standard** `? - ?` and filling out the following form:

Non Standard result	✕

24 Zakhartsov Viacheslav V.	0 - ½ ▼	4 Topalov Veselin
	0 - ½	
	½ - 0	
	0 - 0	
Set Result	1U - 0U	Cancel
	0U - 1U	
	½U - ½U	
	0U - ½U	
;	½U - 0U	
	0U - 0U	

See Appendix A, question 15 for further info about non-standard results.

The 'U' denotes an unrated result, i.e. it is considered as played but not valid for the Elo rating variation or norm calculations.

The pairing shows at bottom the players excluded from pairing (absent players or those that have

required a ½ point BYE).

The button permits to alter the result and status for that round of the unpaired players. It permits to switch between 0, half and full point BYE.

NOTE: FIDE deprecate the full point BYE. Vega will warn the user when try to set such result.

After choosing a result, Vega will automatically move on to the next pair. The results should all be entered before performing a new pairing or modifying an old one. If the user is not able to finish this operation in one session then he can **Save** the data and **Exit** from Vega. Upon restarting, Vega will remind the user to finish entering the round.

In case of a big tournament the user may want to show only the pairs without results. This is done with the button . The button will show all pairs again.
Once entry is complete, Vega will automatically update the Cross Table.

NOTE: Vega automatically updates the cross table and ranking list when important parameters are changed (player data, tie-breaks...). However, if the user wants to force the update of the cross table, he must press the button *.*

The data concerning the tournament is stored in the file `<TournamentFolder>.vegx`. It is a standard ASCII file and is updated when the user presses **Save Tournament**. Although it can be modified using most editors, the user should not do so for risk of seriously damaging the tournament data.

If the user wants to correct results or just show previous pairings, they must first choose the round. To this end, select the round number in the **round** field. All the pairings for that round are displayed and the user can, as usual, select the pair and the result.
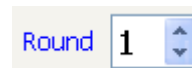
Before performing a new pairing, Vega produces a backup file named `<TournamentFolder>-VEG-N.bak.` where N is the last completed round. If for some reason the normal file is damaged, the backup can be re-loaded using **Dangerous Stuff! / Load Round** from the **File** menu.

2.6 Cross Table and other useful reports

Moving on to the **Output** page, the user can visualize and print several files. All the data files generated by Vega are in text format, although they have several different extensions. A few generated files have the extension QTF and when printed, result in higher quality output. These files are in Rich Text Format and can be modified within Vega using the UWord editor, by pressing the button. All other files can be opened with the button.

Files relevant to the tournament can be shown by pressing the buttons in the Output page. They are:

Cross Table, .

Sorted Cross Table produces a cross table in which the pairing number of each player is

regenerated according to his rank.

Standing, file standing.qtf displays the first three tie-breaks criteria

Standing, file standing.txt displays all tie-breaks criteria

Board Cards, : labels to put on the table. The labels starts from number 1, but other number can be set.

Pairing, . pairing with results after insertion.

Print, : prints the contents of the window. The number in the box indicates the point-size of the text to be printed and not of the text to be showed in the window. The user can print the selected text with the button (does not work with qtf files). A preview is shown before printing commences. The option permits to choose what to print in the standings and/or in pairing.

Print registered players,

Print schedule (if set in tournament definition**),**

Set multipage printing, : permits to select which documents to print and how many copies each.

Print all documents at once set with the previous option

2.7 File → Tournament manager

Delete Round will delete the current round and bring Vega to the state of "Waiting for pairing" in the previous round. Vega stores all the data of past rounds so the tournament can be undone right back to the first round this way.
Reset Tournament will return Vega to the first round with the same players, including the late-comers. This could be useful during a simulation of the tournament.
Modify Tournament permits the modification some of the tournament parameters.
Reopen Registration will return Vega to the state it was in before closing the registration. The arbiter must once more close the registration to start the tournament.
Load Round will re-load the round file at round N from backup, if for some reason the normal file is damaged.

2.8 The "Standings" Menu

Rank Rating Group. This generates the file `rankgrp.txt`, containing ranked groups of players, the groups being defined by specifying rating ranges.
Rank Date Group. Generates the file `rankdagr.txt`, containing ranked groups of players, the groups being defined by specifying the year of birthday (format YYYY) ranges. The player date format could be one of the following: ddmmyy (if yy<20, it means 20yy, otherwise it means 19yy). Also valid are yyyy, yyyy.mm.dd, yyyy/mm/dd, with mdy in any order.
Missing Point Score System: This is a new way to calculate the final standings in a Swiss

tournament. The method pretends to transform the Swiss system into a round-robin tournament and tries to predict the results of games amongst players that were not paired in the Swiss tournament. This is performed by analyzing the cross table and the relationships between all players via their common opponents. The details of the pairings are saved in the file `mpscorelog.txt,` while the new ranking is stored in `mpscore.txt`. Further details can be found at
`www.vegachess.com/Swiss/missingpoint.htm`

Zermelo Score System, Zermelo Score System Extended: This is a new way to calculate the final standings in a Swiss tournament. See Appendix L for details.

Assign Prize (Hort system). This system aims to better distribute the prize money amongst players on same points at the end of the tournament. Here is an example of this system; suppose 4 players share the same place. The four prizes are as follows: 1st €10.000, 2nd €8.000, 3rd €6.000, 4th €4.000. We have to split €28.000. We split this amount in two equal parts, each of €14.000.
The first part will be split equally and each player receives €3.500.
The second part will be split according to the ranking after a tie-break.
#1 receives €3.500 + €5.000 = €8.500
#2 receives €3.500 + €4.000 = €7.500
#3 receives €3.500 + €3.000 = €6.500
#4 receives €3.500 + €2.000 = €5.500
(Please note that the amounts €5.000, 4.000, 3.000 and 2.000 are just half of the original prizes.)

Rank Teams. This saves a ranking of all teams (players with the same Origin field) participating in the tournament, to file rankTeams.txt. The points of a team are the sum of points of the best N players of that team. N can be defined and its default is 4. It also shows the ranking applied individually to the first N boards.

Rank Categories. This writes a ranking of players grouped by their grading categories to the file rankcat.txt.

Rank Groups. This writes the ranking of a tournament set as explained in Appendix M.

Upset Results: are those results in which a lower rated player win against a higher rated player. The standings is based on the rating difference (draw count half difference) and can be obtained for each round or for all rounds.

Standings with FIDE and National rating: show the usual standings but with both rating FIDE and national.

2.9 The "Extras" Menu

Items that are not self-explanatory are described below.

Set Group for accelerating pairing. Please see section '2.11.9 Accelerated rounds' for details.

Make Badge. It prepares form with key words to be filled with values referring to the tournament data. The form should be in the folder `/badgetemplate` in the installation folder. They can be prepared/modified by using the integrated editor in the page Output (icon [W]). These are the key words that can be used:

```
##PLAYERNAME : player name
##TOURNAMENTNAME : tournament name
##RTGFIDE : FIDE rating
##RTGNAT : Rating/grade national Rating/grade
##RTG : Rating/Grade used for pairing
##PLAYERID : pairing number N during the tournament
##DATAB : tournament begin date
##DATAE : tournament end date
##TITLE : player title
##TOURNAMENTPLACE : place tournament
##ORIGIN : player origin (club, province, region, …)
##COUNTRY : player federation
##IMAGE : player federation flag
```

Set memo message. Lets the TD set a remark that will be prompted at a given round. This feature is useful to take note of those players that need to be excluded/included at a given round.

Set Festival. This permits to indicate the sections of a tournament. A drop down menu will appear on the right side of the menu bar listing all the sections. The user can quickly jump among the sections selecting them. Before opening a new section the current one is automatically saved.
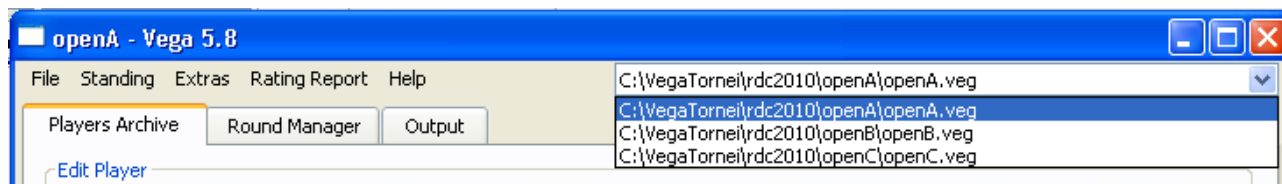
Festival statistics. Save a file with relevant statistics regarding all sections of the event.

Round Robin Calendar. This saves all pairings in a round-robin tournament to the file pairsRR.txt.

Add external pairing engine. See Appendix N.

Regenerate pairing number. Vega assigns to each late entrant a progressive pairing number (N) irrespective of his rating. The pairing number affect the pairing of systems such as FIDE **Swiss Dutch** and **Swiss Burstein**. So it is mandatory for these systems to reassign the correct pairing number to each player and that is performed via this option.

> **NOTE that FIDE:**
> **a) permits to reassign the pairing number at any rounds when a late entry joins the tournament;**
> **b) forbids to change the pairing number after the fourth round has been paired due to modification of rating/title/name of a player.**

> **NOTE:**
> **Vega does not know the reason behind the regeneration of the pairing number and will permit it anytime. However, if the option is used after round 4 has been paired it will warning the user to not break the previous FIDE rule.**

Add QR code to Vegaresult: generate and save in the tournament folder a QR code printed in pairings and standings. The QR encode the tournament link to the Vegaresult site. To remove the QR code simply delete the file qr.png in the tournament folder.

Print Swiss cards: print the Swiss pairing card that can be used in case of manual pairing. If printed at round 1 the cards will be empty, otherwise they will contain all data known at the current round.

R: round;

C: color;

F: floater history according to the selected Swiss system (▼=downfloater, ▲=upfloater);

OPP: opponent N number;

Res: round result;

Score: score at the given round;

Ex: this coloumn must be filled by the arbiter extra data useful for the next pairing, for example the expected color and/or fictious points in case of accelerated Swiss system.

15	Forlano Luigi					
	ITA		CN			2035

R	C	F	OPP	Res	Score	Ex
1	▫		5	0	0	
2	▪		20	0.5	0.5	
3	▫		9	0.5	1	
4	▪	▼	BYE	0	1	
5	▪		21	1	2	
6	▫	▼	16	0.5	2.5	
7						
8						
9						

Assign Players to Board: a player can occupy the same table in each round. This is done (see next picture) by selecting the player and the board, then pressing the button [>>]. To remove him from the assigned board select the board and press [<<].
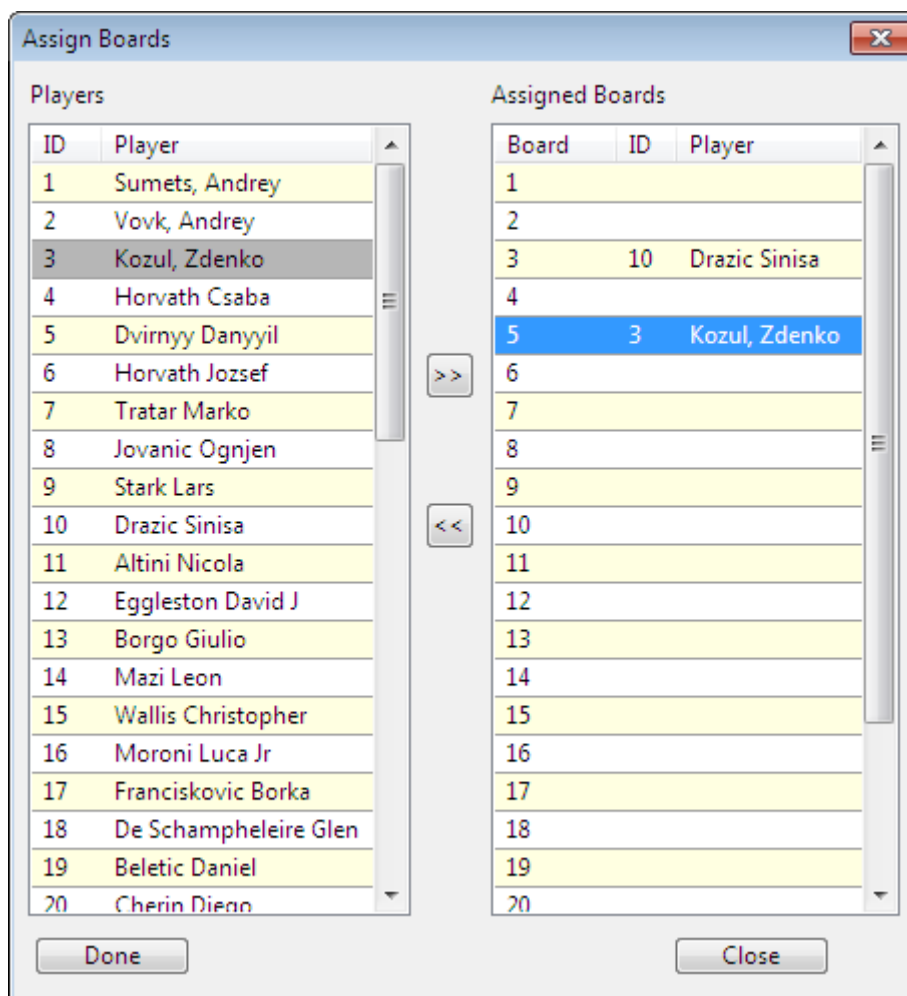
2.10 The "Rating Report" Menu

From this menu it is possible to generate several rating reports intended for submission to a number of Chess federations.

FIDE:

1. **Rating Report** permits insertion of new data and the creation of a rating report to be sent to FIDE. The created file is named FIDE-<TournamentFolder>.TRF.
    The report is not saved if there are still present adjourned games and/or unfinished games.

2. **History Card:** For a Swiss tournament this contains the player cards of all FIDE rated players and those unrated players that have played against at least one FIDE rated player.
    The rating variation calculation by Vega uses the following FIDE formula:
    $R = R_0 + K \Sigma_i (P_i - PA_i)$
    Where R is the final rating, R_0 is the initial rating, P_i is the player score result of round i (1, 0.5 or 0), PA_i is the score probability depending upon the rating difference between the player and their opponent at round i.
    If K = 0 (the default value) the rating variation will be shown in units of K.
    The player performance for the tournament is calculated using the FIDE procedure described in https://www.fide.com/component/handbook/?id=198&view=article .
    For a single Round Robin tournament with unrated players the rating calculations are made using the FIDE procedure. If the Arbiter wishes to exclude from calculation the results of one or more unrated players he must, at the end of the tournament, set their status to '1/2'.

3. **Find Norm** produces the file `fidenorm.txt` containing a list of players and their performance relative to various title norms (GM, IM, WGM, WIM). Moreover, a grid is displayed with the same info.

4. **Tournament statistics.** This reports general statistics of the tournament to the file `tourstat.txt`. It contains the number of federations, number of rated and unrated FIDE players, titled players, etc.

5. **Norm certificate IT1:** saves the files `fidenormID=NasX.txt` (in text format) and `fidenormID=NasX.qtf` (in qtf format) containing the FIDE norm certificates: N is the player pairing number, and X is the sought norm (GM, IM, WGM, WIM).

    WARNING: Vega performs the calculation regarding the rating and produces a detailed report. It is responsibility of the Arbiter to check that all the FIDE requests are present in order to validate the certificate (i.e. number of unrated, number of titled players, etc...).

6. **Statistics:** saves the file tourstat.txt containing useful information about the tournament.

7. **Tournament certificate IT3:** produces the file FIDE-IT3.qtf containing statistical information on the tournament.

8. **Import tournament in FIDE 2016 format**: can import the data tournament made by another program. The format used is the so called TRF2016 described here https://www.fide.com/FIDE/handbook/C04Annex2_TRF16.pdf

9. **Performance Calculator:** permits to performs some calculations regarding the performance rating. (see picture below)

The user can enter the player pairing number N and press the ENTER key to list his opponents and rating details. The window will show the total score made by the player and his average rating opponent. The bottom part of the window shows the performance rating based on the actual score.

The **required points** represent the points necessary for a performance rating at least equal to the rating threshold (set to 2450 in the previous picture). Together the required points are indicated the points difference with respect the actual score. For example: "4.0 (+2.5)" means that to get a 2450 rating performance the player needed 4.0 points, but he made +2.5 more than necessary. In our previous case the player realized "6.0 (+0.0)", i.e. the exact point required for the norm on IM.

By a mouse right click on the right column "include" the user may decide which game enter the calculation. The user can even change the opponents rating and rise it to the "Rtg floor" for that norm.

Then by pressing the button Calculate/Update he can redo the calculations. The user can even change the opponents rating.

This panel is useful when are played more than 9 rounds and a player need to select only 9 of them to check if a norm has been done.

10. Norm Prediction Points (Round Robin): generates a table showing how many points a player should get at a given game to achieve an international norm.

```
|    Players/Games           |   1  |   2  |   3  |   4  |   5  |   6  |   7  |   8  |   9  |  10  |

SONIS Francesco
----------------------------|------|------|------|------|------|------|------|------|------|------|
ARO                         | 2556 | 2523 | 2539 | 2511 | 2491 | 2494 | 2495 | 2488 | 2494 | 2495 |
points for GM norm          |  1.0 |  1.5 |  2.0 |  2.5 |  3.5 |  4.0 |  5.0 |  5.5 |  6.0 |  6.5 |

GILEVYCH ARTEM
----------------------------|------|------|------|------|------|------|------|------|------|------|
ARO                         | 2506 | 2473 | 2495 | 2497 | 2481 | 2494 | 2493 | 2503 | 2492 | 2494 |
points for IM norm          |  0.5 |  1.0 |  1.5 |  2.0 |  2.5 |  3.0 |  3.5 |  3.5 |  4.5 |  4.5 |
points for GM norm          |  1.0 |  1.5 |  2.0 |  3.0 |  3.5 |  4.0 |  5.0 |  5.5 |  6.0 |  6.5 |

GENOCCHIO Daniele
----------------------------|------|------|------|------|------|------|------|------|------|------|
ARO                         | 2506 | 2506 | 2484 | 2498 | 2498 | 2485 | 2495 | 2495 | 2503 | 2496 |
points for GM norm          |  1.0 |  1.5 |  2.0 |  3.0 |  3.5 |  4.0 |  5.0 |  5.5 |  6.0 |  6.5 |

VALSECCHI Alessio
----------------------------|------|------|------|------|------|------|------|------|------|------|
ARO                         | 2556 | 2523 | 2539 | 2511 | 2491 | 2494 | 2495 | 2488 | 2494 | 2487 |
points for GM norm          |  1.0 |  1.5 |  2.0 |  2.5 |  3.5 |  4.0 |  5.0 |  5.5 |  6.0 |  7.0 |
```

USCF: This generates the files used by USCF (USA) for rating reports (see Appendix O for details).

FSI: This generates rating reports for the Italian chess federation (see the Italian version of this user manual for details).

ECF: generates rating reports for the English chess federation. (See Appendix H for details.)

DWZ: generates rating reports for the German chess federation.

NZCF: generates rating reports for the New Zealand chess federation.

> **Generic Tournament Description file:** it is a general-purpose rating report format. It is very similar to the FIDE one but includes even national data (see Appendix P).
> **Rating report for other federations can be provided free of charge. Please contact the author.**

Convert National Archive to UTF8 encode. This option transforms the native encode of an archive to UTF8. In this way Vega can read correctly special characters of a given alphabet. For example, this option with Latin 1 alphabet, should be used by the arbiter of German chess Federation to transforms the file spieler.csv in the file spieler.csv-utf8.csv encoded in utf8.

2.11 Special Tasks

2.11.1 Manual Pairing (not for the round-robin system)

Vega allows easy insertion of manual pairings. This is done by pressing the button **Manual**. The pairing continues by filling in the fields labeled 'White' and 'Black', then pressing the button **Add Pair**. The user can enter IDs with the mouse by selecting the players in the list of the **available players** at the top right of the window. In this list the players are sorted by score, rating and name; it even shows their duecolor (Col) and whether is changeable or fixed (c=F).
The pair is accepted only if it is legal (green label OK) and it is refused if illegal (red label NO). The user need not be concerned about the colors because Vega will assign it automatically when the user presses the **Done** button. Only in the first round will Vega accept colors entered by the user.

NOTE: it is recommended that the user has a clear idea about which pairs he wants to add and write down them on paper before proceeding. The user can change the order of the pair or assign a table to a particular pair by selecting the pair and then pressing the keys CTRL+'Up' or CTRL+'Down'.

To remove an inserted pair, the user must press the **Remove Pair** button. During the entry, Vega shows the number of the remaining players to be paired and the number of pairs already inserted.

*NOTE: the Pairing Allocated BYE (PAB) can be assigned manually in the same pairing **only one time**. Vega will not permit multiple PAB.*

The bottom left panel contains the players unavailable for that round, i.e. players absent for that round or that withdrew the tournament. The players that got byed points via the set status option are not listed. In case a pairing has been already done the list include any late entrants.

When entry is finished, the user should click **Done**. Vega will correctly assign the colors (except in the first round) and return to the **Round Manager** page, waiting for a command.

2.11.2 Export Data

The **File → Export** function is useful when the user wants to extract the personal data of the players to be used in other tournaments. There are three possibilities: **Export → All Players,**

Export → Tournament, and **Export → Selected Player.**

i) Export → All Players: With this option, the data for every player is exported to a text file. The format of the file, called *Vega* format, is very simple and can be managed by any spreadsheet or text editor. It consists of a first row with the name of the fields followed by the data for each player in subsequent rows separated by a "**;**".

The maximum length of each field is the following:
- NAME: 30 characters;
- FEDERATION: 3 characters;
- BIRTHDAY: date in the format dd.mm.yy or ddmmyyyy (8 characters);
- G(ender): 1 character (m or f).
- TITLE: 3 characters;
- ID FIDE: 10 characters
- ELOFIDE: 4 digits;
- KFIDE; 2 digits
- ID NAT: 8 characters;
- ELONAT: 4 digits;
- KNAT: 2 digits;
- ORIGIN: 20 characters;
- INFO: 20 characters.

The players in this archive can be loaded later as described in section 2.11.3.

ii)Export → Tournament. This option is useful in tournaments with many sections. In this situation it is best to have one large tournament, then extract the data for each section, selecting the rating range for each of them (see below):


The user can select players by their national rating, FIDE rating, or both. In any case, each section should be exported to its own directory (folder) -do not mix the sections in the same directory. The exported players are not removed from the current large tournament.

2.11.3 Importing players from a text file database

Vega can import players from any formatted text database by using the database tabbed pages in the lower part of the window. The user can define up to three different databases and work with them simultaneously.
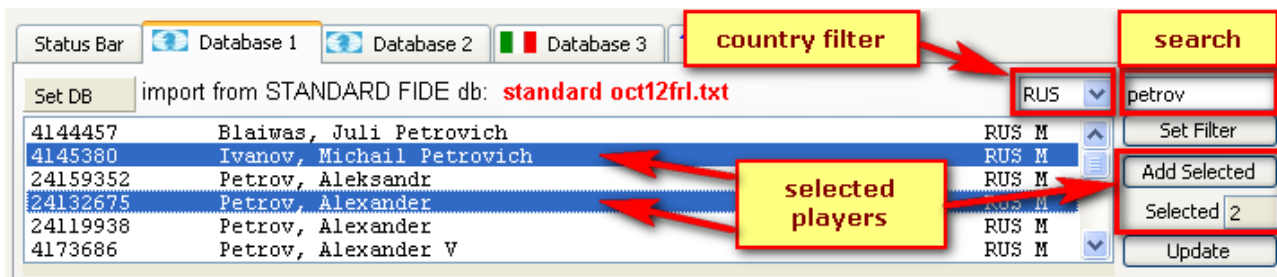
The wanted database is chosen with the option **Set DB**.
Vega offers the option to choose from a list of pre-defined databases, or a custom database either of a format with fixed-length fields or of a generic CSV (Comma Separated Variable, i.e. the field

delimiter is "**;**") type format.

The pre-defined databases do not need a data filter (it is automatically loaded). However, the custom databases require a filter to inform Vega which fields to import and where they are. The user can retrieve players from different FIDE databases in text format. The correspondence among databases and the rating being retrieved in each DB is shown in the next picture.

The user must enter a string of **at least 6 characters long** to activate the search. If the user enters the string ****** all the players in the database are shown (for the FIDE database it is necessary to select a country code to limit the output). The user should ensure there is enough memory in the computer to avoid a program crash that might be caused by loading a huge database.

Vega will show all the players matching the entered string (the search is not case sensitive). To add a player to the tournament, the user must:

- Select a player.
- Double click the selected player or press the ENTER key.
- Select a range of players: Left click of the first player, hold down SHIFT and left click on the last and then press **Add Selected** to import all players at once. The user can also select multiple players by holding down the key CTRL and left-clicking on each player.

A database of type **National Fixed Length** has national rating and ID data instead of the FIDE ones.

For this and others custom databases the user must set a filter by pressing the **Set Filter** button. In the case the database has fields with fixed length the following window will appear:

The previous picture shows an example in which the user wants to import the fields Name, Rating, Title, Country, Birthday, ID code and Gender (the corresponding check boxes are pressed). Then for each field the user inserts the column from which begin to read that field (the first column of the record start from 0). The length of each field is fixed by and specified in Max Length.

The selected filter can be saved for reuse using **Save Filter and** the filter's filename should have a flt extension. It can be reloaded later with **Load Filter**.

The generic **CSV database** works with databases in which the fields are delimited by '**;**'. One

needs to define a filter and indicate the fields to be imported. The first field has position 0 (zero). This type of database can be used to import from FIDE or national databases as well as custom-built databases.

> *Note: In English speaking countries CSV type databases are usually delimited by ',' instead of ';'. This default behavior can be altered on Windows machines by going to Control Panel→ Region and Language Settings →Additional Settings→ List Separator and changing the ',' to a ';'. Programs such as Excel will then delimit fields with ';' as required.*

The database of type **Vega** do not need a filter and contain both FIDE and national data. Here is an example of such database

NAME; COUNTRY; BIRTHDAY; G; TITLE; IDFIDE; ELOFIDE; KFIDE; IDNAT; ELONAT; KNAT; ORIGIN
Rossi Mario;BEL;1959;m; GM;   200930; 2587;10;0;   0; 0;Club64
Bianchi Giorgio;ITA;2000;m; GM;   865834; 2565;10;0;   0; 0;Arrocco

The **Update** button is useful when the ratings have been changed and the arbiter needs to synchronize them with the newest value contained in the database. This task uses the player National or FIDE ID to look up the player in the database. The FIDE and VEGA databases permit to choose which fields to update in details
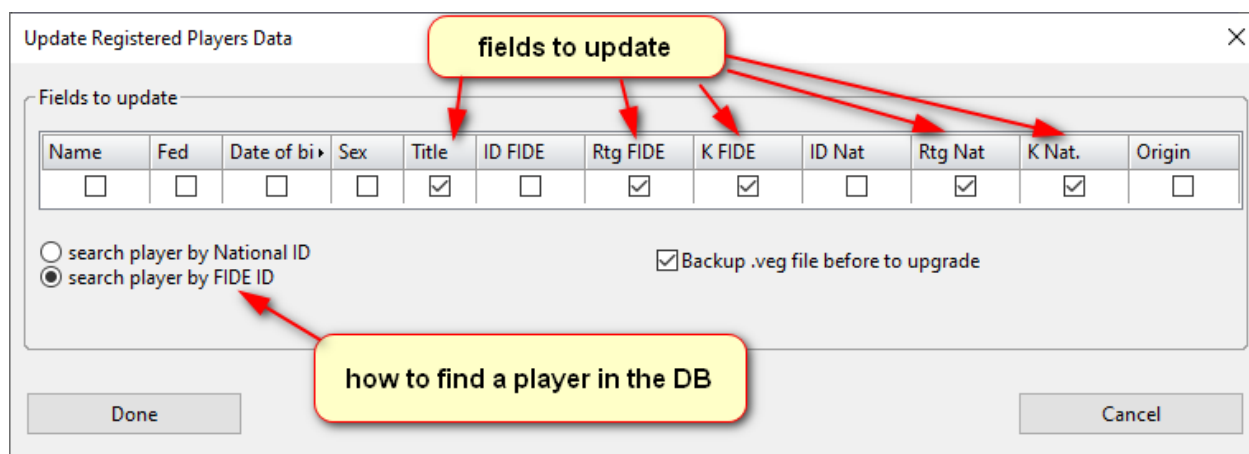
Others database permits a partial update of the data.

2.11.5 Pairing of late entrants (Swiss system only)

This is for players that did not communicate their participation in the tournament and arrive after the first round has started, when player registration cannot be reopened. Their registration proceeds as that of normal players with the exception that they cannot be deleted, only modified when necessary. Vega assigns consecutive IDs to each late entrant as they are entered.
If the pairing has been already done the late entrant has status set to unavailable for that round. Otherwise he is available and then paired for the next pairing.
Sometimes there are several late entrants and the arbiter may pair them manually against themselves. For example, we closed the registration with 58 players and generated the pairing for the first round. Then 6 late entrants arrive. Vega will assign them the IDs 59, 60, 61, 62, 63 and 64. Let's suppose the arbiter wants to pair them in this way:

|	
59	60
61	62
63	64

To let Vega add these pairs press the **Modify Pairing** button. The window for manual pairing

appears and the late entrants are listed in the panel of withdrawn players. So they should be made available with the option **Make available selected player**. At this point, the arbiter can add the new pairs listed above. This way the new pairs will appear in the normal pairing list.

> *NOTE: The 'Modify Pairing' button can be activated only for the current round (the pairing of the previous rounds cannot be modified).*

2.11.6 How to add points to late entrants in previous rounds.

The user can award the late entrants with points (gained against the BYE) in the round in which they were absent. For example, if a player enters at round 3 and the user want to give him a ½ BYE draw in round 1:

1. Show the pairing of round 1;
2. click on the desired player.
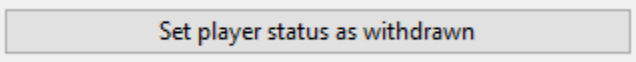3. press the button and assign the ½ result.

2.11.7 Special corrections after a round started (Swiss system only)

The following are cases when the pairing has been done and the tournament started.

a) *In the pair A vs B, player B doesn't show up. The arbiter assigns player A the 1F-0F result but then realizes that the missing player asked for a HPB (Half Point BYE), but he forgot to register his request.*
After realizing his mistake, the arbiter will give a FPB (Full Point BYE) to A and the requested HPB to B. To perform this task the arbiter needs:
i) press Modify Pairing button;
ii) unpair A and B using button Remove Pair;
iii) Exclude them from current pairing using button

> Set player status as withdrawn

iv) Accept the new pairing;
v) Give each player the wanted result using button .

b) *After doing the automatic pairing, there is a PAB (Pairing Allocated BYE). A player who was given a HPB turns up after the round starts (before the forfeit time) and wants to be included in the round. The arbiter wants to pair him with the PAB.*

i) In the round manager window use the modify unpaired result button, , to change him from HPB to a zero point bye.
ii) Use Modify Pairing;
iii) The player will now appear in the unavailable player window. Move him to the pairings window, unpair the pairing allocated bye and pair them.

2.11.8 Improving colors

Vega automatically assigns the correct color to each player[1]. However in some cases the arbiter

---

[1]   If using the USCF Swiss system, Vega will, after the so called *natural pairing* (upper half vs bottom half), improve the color distribution using the "Look Ahead method" described in the *USCF Official Rules - 5th edition.* See Appendix G for further details.

might decide to assign them manually to refine the pairing, exchanging colors. Press the **Improve colors** button in the **Round Manager** page.

A new window will appear (see below) showing the details of the pairs in the current round. The user should pay attention to the colored squares because their colors have special meaning. In fact the duecolor white is indicated by a white square, the duecolor black is indicated by black square. A blue square appears for players that have no duecolor, for example at round 2, after a forfeit game. Inside the square there is a smaller square that is red if the player has a fixed duecolor, or green if the player can change their duecolor.

To improve the colors, the user should avoid, or at least minimise, the number of pairs in which both players have the same duecolors. To this end he should exchange those players by using transposition (exchange between players in the same column) or interchanges (exchange between players in different columns). To exchange two players the user should press the N-buttons of the selected players. Their IDs will appear in right hand side of the window. Just below this appears the rating difference involved in the exchange.

With the button **Exchange Players** the user can exchange the players. Vega will inform the user about the legality of the proposed exchange. If the user needs only to know if the two selected players are compatible they should press the button **Verify Pair**.

To accept the new pairing the user should press **Done** otherwise press **Cancel** to abandon all the changes.

NOTE: Some expert USCF TDs prefer to improve the colors themselves after natural pairing. Vega saves the natural pairing at round N in a file named `natpairN.man`. This pairing can first be loaded with the option "Modify Pairing" and then improved using the "Improve colors" option.

2.11.9 Accelerated rounds

This section regards the custom accelerated system (the FIDE Baku system id handed automatically by Vega). The option **Extra → Set Groups for accelerated rounds** allows the definition of up to three groups of players. The user can choose the boundary of the groups, in terms of rating, by using the context menu (right click on the mouse). See picture below:
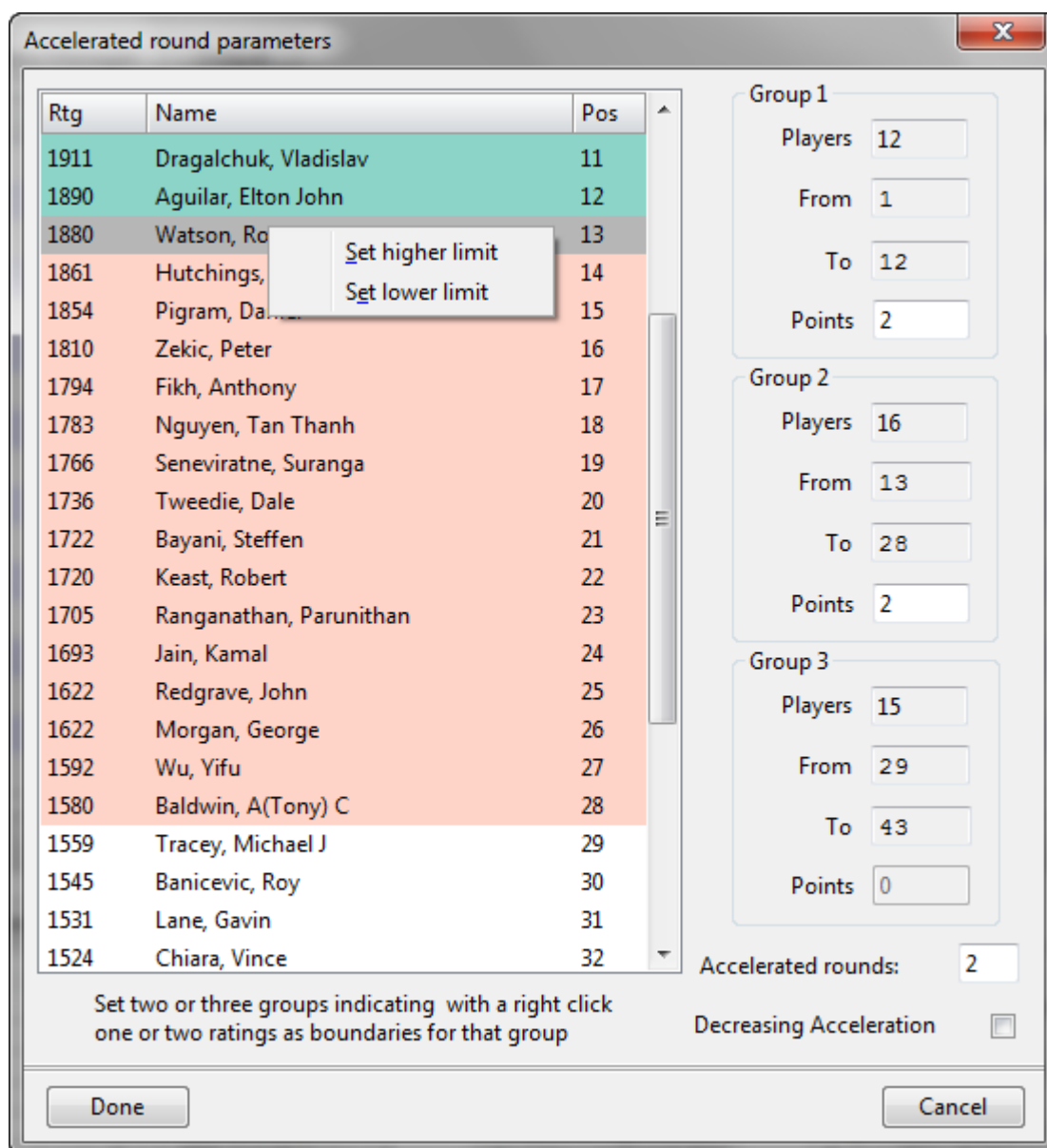
The right-hand side of the window shows the details of each group after the limits have been chosen.

Acceleration works by adding a fictitious number of points to each player's score based on which group they are in. When it comes to pairing, the groups are separated by virtue of the fact that the

players are, at least initially, on a different number of points. The user should set the fictitious points for each group and the number of accelerated rounds after which the fictitious points are removed. Please note that the total score of each player showed in the pairing list is the sum real score + fictitious points.

It is possible to run the tournament using a system of acceleration that allows the groups to merge more progressively based on the score of the players. For higher scoring players, the acceleration is increased by half-points, effectively decreasing the acceleration difference between them and those in higher groups (see Appendix Q). This variant (invented in France) can be activated by clicking the "Decreasing Acceleration" checkbox.

2.12 The "Publish online" Menu

Throughout the tournament, Vega generates Web content in HTML format, in a directory called www<TournamentFolder> (as a subdirectory of the working directory). In this directory, the site home page is a file called index.html. In this directory Vega even generates a pgn template (skeleton) file for each round.

> **NOTE***: The user must place the completed pgn file in a different directory to prevent Vega overwriting it!*

The user that wants to publish the site must publish on a server all the files present in www<TournamentFolder>. The web content is automatically updated by Vega while the tournament proceeds. The user can tune the site using **Publish online / WWW Settings**.
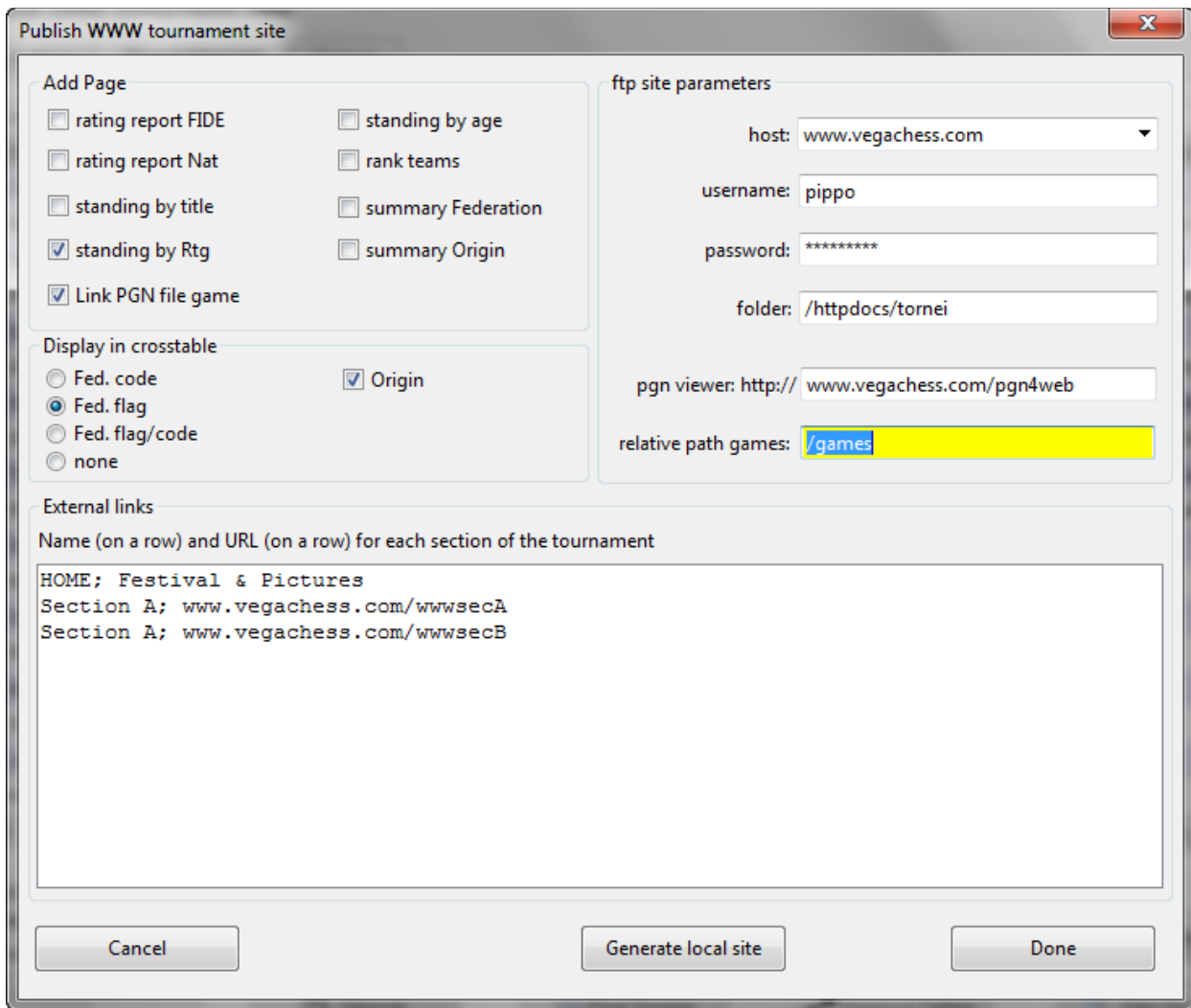
Link pgn file game: if checked, the pgn game files are available for download;
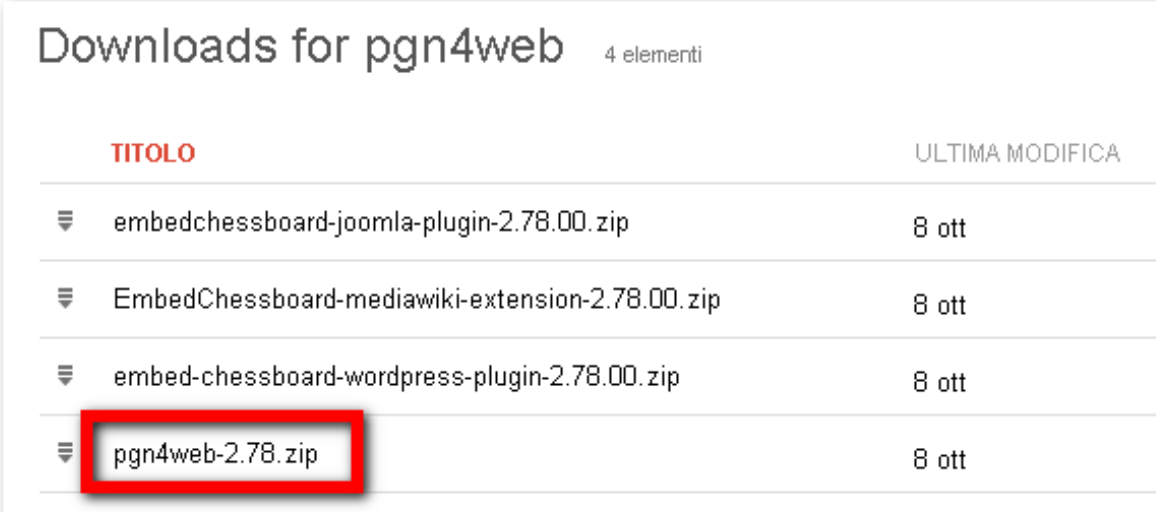
Add rating report FIDE, Add rating report Nat: if checked, an html page is created with the rating (Elo) report for to FIDE or the National federation (the latter currently mostly oriented toward the Italian federation);

Use country flag: if checked, a country flag will appear in place of the country name.
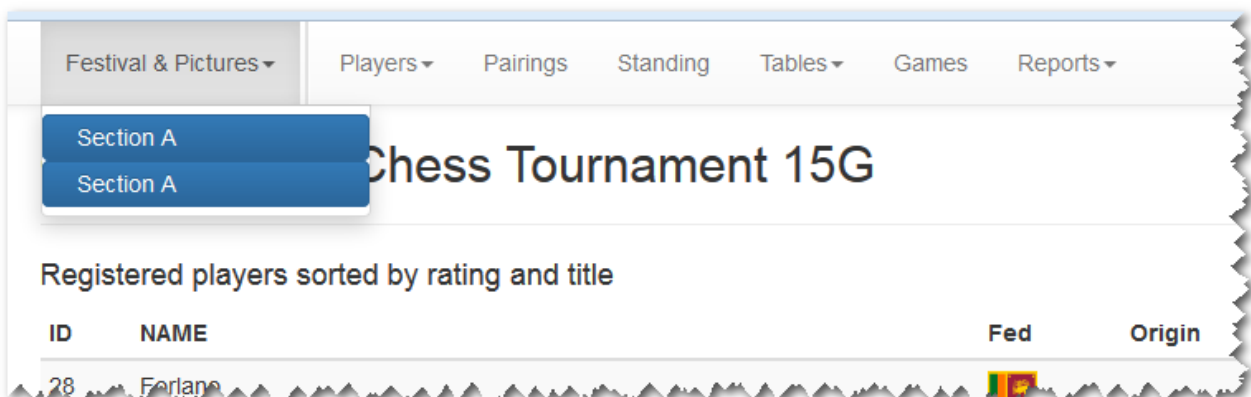
Pgn viewer: it is possible to install a pgn viewer able to read the pgn games generated by Vega. So

far it has been tested the freeware viewer **pgn4web** (http://pgn4web.casaschi.net/)
Download the latest version of pgn4web (see next picture) and unzip in a directory of your computer.
Copy this entire directory on to the server. Let's call it **pgn4web/** in the root directory of the server.

Copy the files vega.html and vega.css from the directory pgnviewer (inside the Vega installation directory) in the directory **pgn4web/**. Take note of the server directory in which **pgn4web/** is and put it on the field **pgn viewer** in the setting window.

In the field **relative path games** insert the path relative to your root directory to the one containingthe pgn file of your games with name <TournamentFolder>X.pgn, where X is the round. The viewer is now installed and nothing more should be done in the directory containing pgn4web.

While you observe a game, a left mouse click on square E8 opens a popup window with a board set to the current position. You can move pieces by left click of the starting and arrival square. The enabled browser, e.g. Chrome, will even show the evaluation of a chess engine.

NOTE: The pgn files should be in a dedicated folder to prevent Vega to overwrite them. Their transfer must be done with an appropriate ftp program to the desired directory.

In the box **External links** the user may add the links to external pages of the site, or other sections of the same event. The link and its alias should be in the same row separated by ';' .

The box **ftp site parameters** should be filled with the usual parameters to access the site in case the user want to use the embedded ftp client. The field **folder** will contain the www<TournamentFolder> generate by Vega.

The button **Generate local site** permits creation of the web content in case one or more files are missing or damaged.

Publish online / Local site: Launch the predefined browser and load the page index.html of the local web site generated by Vega.

Publish online / Publish WWW. It permits to the transfer of the www folder to the specified above. A window prompts the user with new actions:
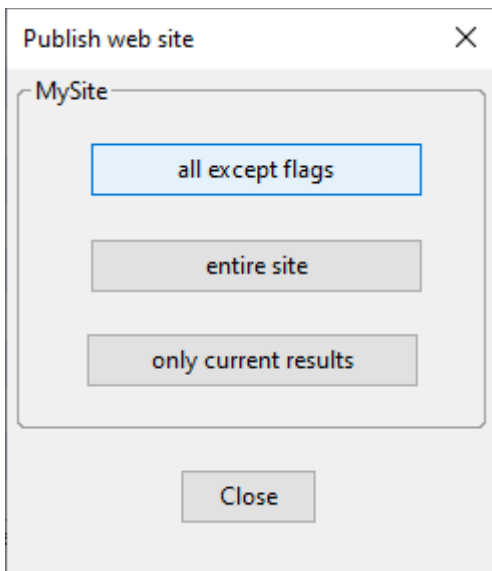
entire site: publish the whole content of the local web site. This option should be used at the very beginning, for example after the pairing of the first round.

all except flags: this option save times because does not transfer the flags on the server. The player's flag does not change during the tournament and this action should be used regularly.

only current results: sometimes the arbiter needs to quickly publish only the partial results got at that moment. This option transfers only the file containing the results of the current round.

3. VegaResult server

VegaResult, www.vegaresult.com, is a site for publishing chess tournaments worldwide powered by Vega and coded by its author. It uses a modern technology and it is optimized for mobile device. The service offered is free of charge.

The site can be used by three different kinds of users:

casual visitor: she/he is interested in consulting the results of a given tournament. This kind of user do not need to register.

chess player: she/he is interested in searching tournaments and is ready to join some of these tournaments. This kind of user do not need to register.
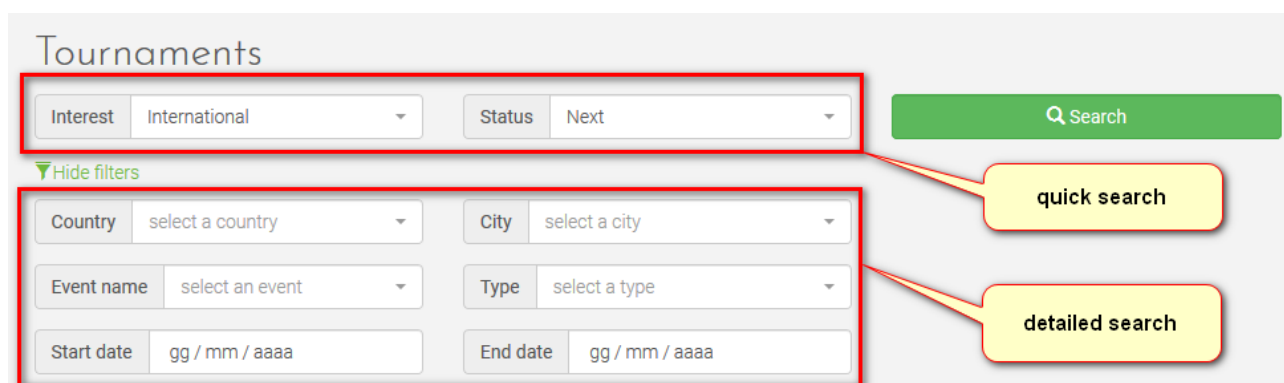
arbiter/organizer: she/he needs to register to Vegaresult site and then submit a valid Vega license file. Then she can create chess events that will be listed by the server and offered to the view of visitors and chess players as well.

3.1 VegaResult for casual visitors and chess players

The visitors can search tournaments and show its content. A custom search can be done on the **Search Tournament** page:
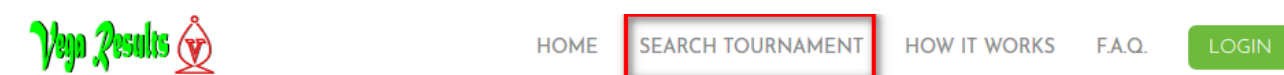
A form permits to select the relevant data the user likes and then by pressing the button Search the search is performed. Here is the search mask:
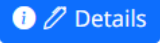

The field **Interest** let the user to narrow its research. For example, the user interested in playing tournaments abroad where FIDE rating variation and FIDE norms are possible, will select _International_ interest and avoid the showing of useless tournaments he cannot participate. From other side the user belonging to a given federation will select _National_ interest if she/is looking for tournaments restricted to players of her federation. The _Local_ interest regards tournament limited to chess clubs.

The field **Status** permits to choose among past, running and next tournaments.

The following picture shows some tournaments after a search has been performed.

Event - Section	City	Fed	Start	End	Type/Rnd	Info/Registration
VM 2023 👁 Vereinsmeisterschaft 2023	Aschaffenburg	🇩🇪	2023-02-12	2023-10-10	Nat 7	ℹ️ 🖊 Details
ACA A-Grade Interclubs 2023 👁 ACA A-Grade Interclubs 2023 Team	Auckland	🇳🇿	2023-06-18	2023-08-20	Nat RR 5	ℹ️ 🖊 Details
BHCC Winter Round Robin 👁 Division B	Melbourne	🇦🇺	2023-05-21	2023-07-30	Int RR 7	ℹ️ 🖊 Details
BHCC Winter Round Robin 👁 Division A	Melbourne	🇦🇺	2023-05-21	2023-07-30	Int RR 7	ℹ️ 🖊 Details
BHCC Winter Round Robin 👁 Division C	Melbourne	🇦🇺	2023-05-21	2023-07-30	Int RR 7	ℹ️ 🖊 Details
2023 Belconnen Cup 👁 2023 Belconnen Cup	Canberra	🇦🇺	2023-05-30	2023-07-04	Loc 6	ℹ️ 🖊 Details
III Torneo città di San Leo 👁 Open	San Leo	🇮🇹	2023-06-19	2023-06-25	Int 9	ℹ️ 🖊 Details
Trofeo FederCUSI 👁 Squadre Team	SAN SEVERINO MARCHE (MC)	🇮🇹	2023-06-21	2023-06-22	Nat 5	ℹ️ 🖊 Details

When left clicked the button ℹ️ 🖊 Details will show the page of the event (see picture below) where all details appear at once. The address of the page is the following:

https://www.vegaresult.com/event/EVENTID

This is the address one must publish about the event. The same page but translated in Italian is at **https://www.vegaresult.com/evit/EVENTID**

Event

Name	Auckland May Weekender 2020
City	Auckland
Country	New Zealand
Start date	2020-05-23
End date	2020-05-23
Interest	Int
Info	**Docs**
Web site	**Web site**
Lat, Lon	
Registration Expire:	2020-05-23 09:00:00

Tournaments

#	Name	Type	Rounds	Prize	Registration
1	Blitz	S	9		Register
2	Rapid	S	9		Register

To join a tournament the chess player needs to click the registration icon
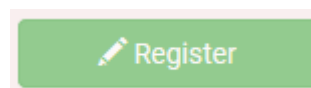
Register

The user is then redirect to the registration page. Here she can fill the form or display the already registered players. After filling the form and pressing the button **Register me!** A confirmation email is sent to the entered email address. It contains a link that needs to be validated and another one that can be used in case the user wants to withdraw from the tournament in future.

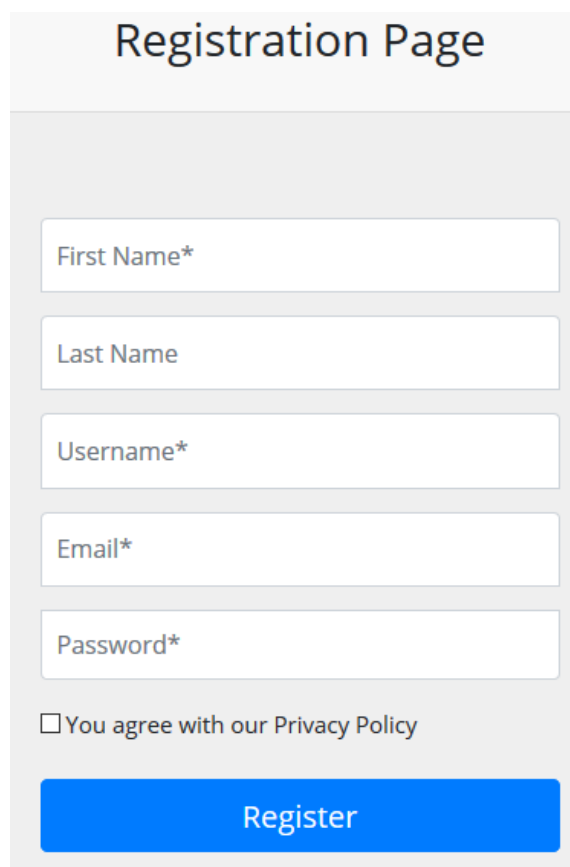## 3.2 VegaResult for authenticated arbiters

The arbiter/organiser that wants to register to the tournament listed on the Vega-Result server needs to register to VegaResult. This is done with the menu item **Login**

The registration form asks for sensible data. The chess player is advised to insert REAL data. In particular the **First and Last name** field should be **identical** to the same of the FIDE database if present. Alternatively, the user not yet present in the FIDE database should insert the name as appear in his national database.

The email field is very important too. In fact the user may ask to receive by email a reset password link when necessary.

The password chosen should be at least 8 characters long. It is intended that the user choose it in a smart way and not share it with others. The site saves the password in an encrypted way and it is not known to the administrator site.


When all data are filled and the **Register** button is pressed a confirmation email is sent to the user. Please allow few hours before the email is sent to the user. The user must answer within 24 hours clicking on the confirmation link.

After confirming the registration, the login is done by the menu item **Login**

After the login is done the user is redirect to her account page.
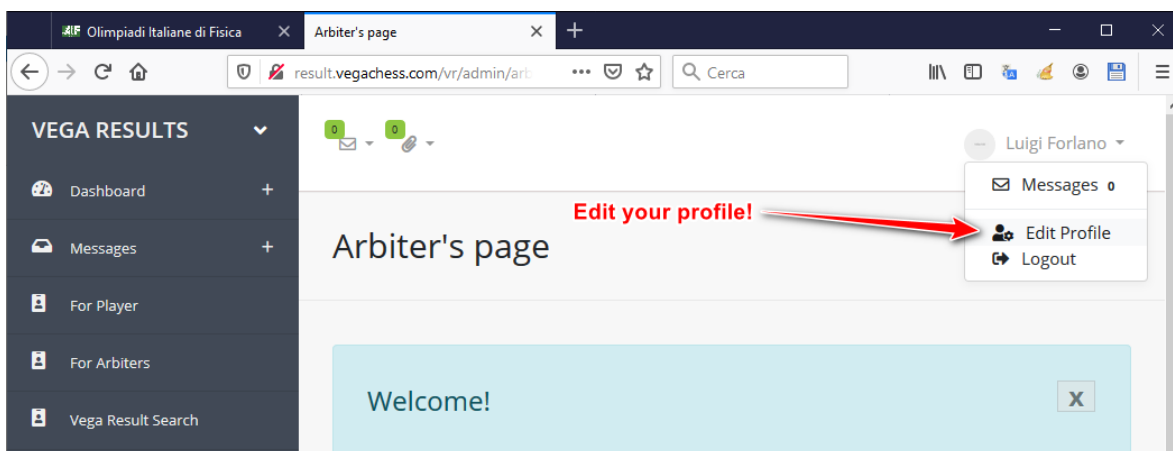
Here she can provide further identification data, i.e. Location, FIDE ID, National ID. This is done by pressing the button edit profile.


You are allowed to change the email address. The username cannot be changed.

The arbiter or organizer that own a valid Vega license must run the program Vega and in the tab page regarding VegaResult should insert the **email** and **password** of VegaResult and then press the

login button to the left of VegaResult tab page
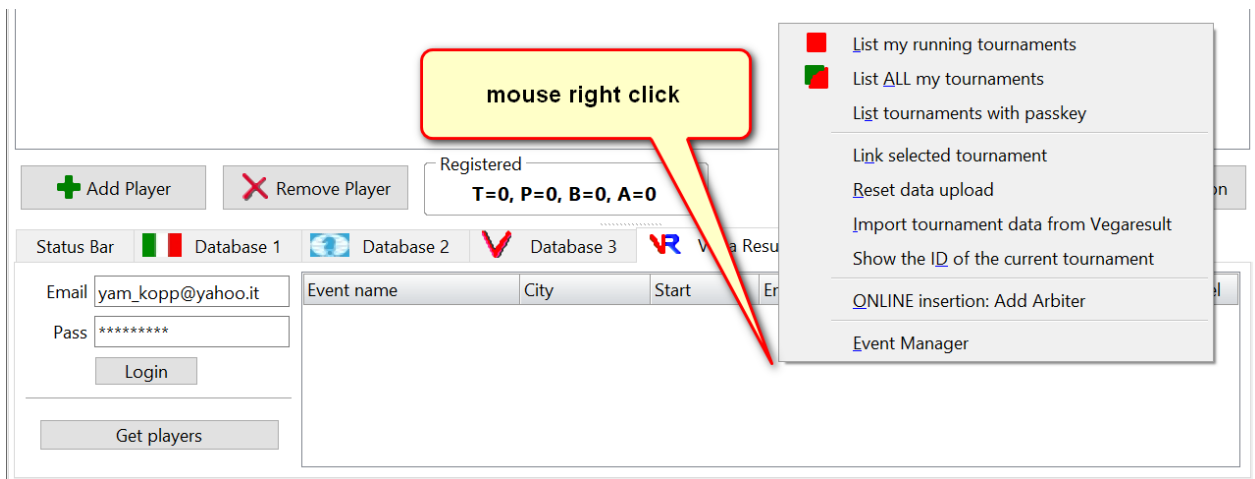
Vega will check your current license and in case of success a message will appear
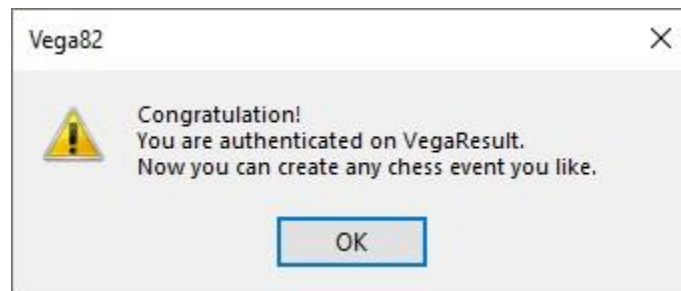
3.3 Create event

The authenticated arbiter can create a chess event. A chess event consists of one or several sections (even called tournaments). A chess event must have at least one section.

To create an event the user must login as seen before and then right click with the mouse in the right panel. A popup menu appears. To create the event just select the item **Event Manager** with a left click. A new window will appear (see picture below). To create an event left click **Add Event.**

Then the user must fill the form that define the event:

The sign "*" indicates mandatory fields. It is responsibility of the arbiter to enter sensible data. The field **Doc** permits to upload a file containing details of the event: contact detail, location, prize distribution, accommodation info, touristic info, etc…). This file should be in PDF format with size less or equal to 300 kByte. To not overcome the 300 kByte limit the user should use only text without useless images. When uploaded the file is renamed.

The user should indicate properly the **interest** or relevance of his event choosing among: 'International', 'National', 'Local'. **International**: event with at least a section/tournament opened to the participation of foreigner chess players. These events are valid for FIDE rating variations and International Norms as well. **National:** tournaments reserved to chess players of a given federations, for example like a national championship or championship of a limited area of a country. **Local**: Tournament reserved to players belonging to a given chess club or very restricted area.

Improper selections are not tolerated and we reserve the right to ban the user responsible of sloppy insertion.

The user can make not public his event acting on the **show event** checkbox. In this case the event will be not available for searching and will be not listed.

Public/visible/searchable event

Private/invisible event

The field **Url** is the address of the organizer site, if exists. The **Latlon** field refer to the Latitude and Longitude coordinate (separated by ",") of the place event as gave, for example, by the site https://www.latlong.net/ .

The field **Registration** permit to set the time and date limit for the online registration. To set properly the time the user must left click on the circular dial
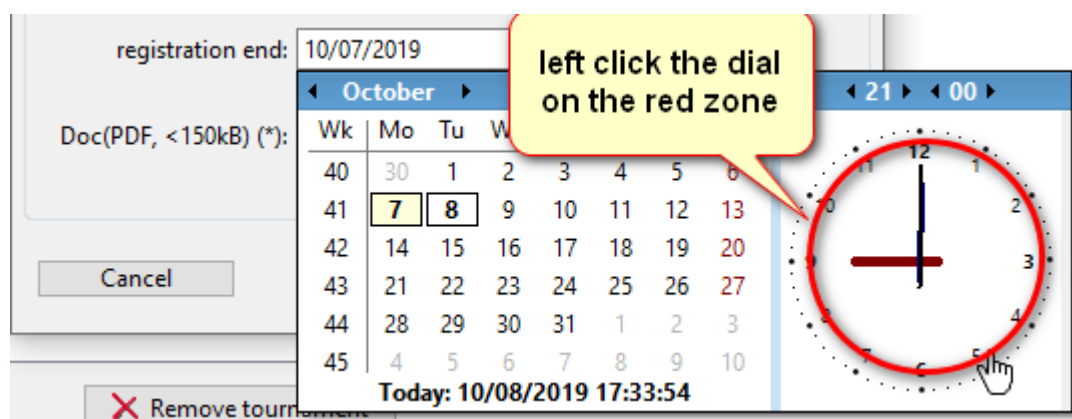
When all fields are set to save the data on the server press the button **Done**.

Each event must have **at least one** section/tournament. To add sections/tournaments to the event the user must press the button **Add tournament**. As usual the field marked with (*) are mandatory.

The **Type** field can be

- S: individual Swiss tournament;
- RR: individual round robin:

The field "Telegram channel" permit to add a service of instant messaging during the tournament. It is described in details here https://www.vegachess.com/ns/telegram

When the form is filled just press the ENTER key.
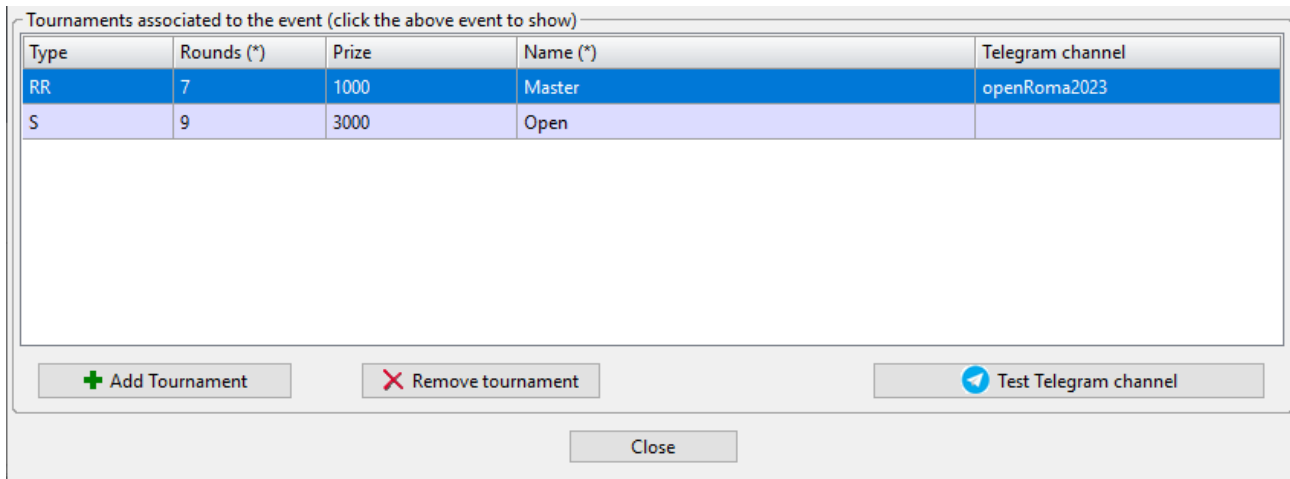
The event can be associated to a passkey via the button **Set Passkey**. A passkey is a random password 32 characters long that can be set and then shared with other arbiters. Who has the passkey of our event can show it and publish in that area. See below for further detail.

It is possible to add a telegram channel how explained here https://www.vegachess.com/ns/telegram to notify your players during the tournament.

3.4 Connect the current tournament to VegaResult

When a tournament is opened or created in Vega a connection with the server VegaResult must be done. To this end the user inserts her username and password and press the button Login.
Now the current tournament (the one opened in Vega) must be linked with that created previously on the server side. This operation is done only one time per each tournament. The mouse right click on the tournament area will show the popup menu we have already seen:
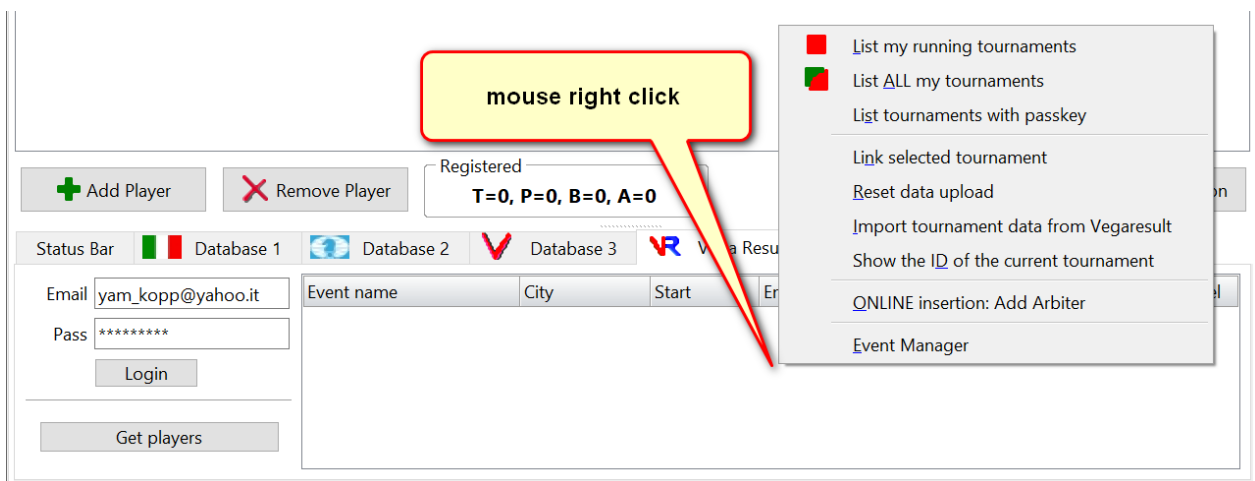
Here is the meaning of each item:
By the default Vega will show at login the running tournament (**List running tournament**). In case the user wants to show all tournaments, even the old ones, the option **List ALL tournaments** should be selected.
**List tournament with passkey** permits to show the tournament of another arbiter/organizer that gave us access to it. In order to do so he must give us a password of 32 characters long.
The **Link selected tournament** is the most important operation and should be the first to be done

before to begin to publish a tournament. This operation must be done only one time, although it can be done again in case of error. To do it just select the desired tournament listed on the panel and select **Link selected tournament**. In case of success a message will confirm it.

Vega transfer to VegaResult only new data or modified data neglecting data previously uploaded. However sometimes the user wants to force the transfer to VegaResult of the entire site. This is done pressing the button **Reset data upload** and then performing the upload.

The item **Import tournament data from server** will import few data in the definition tournament. For example, this is what happen if this item is selected:
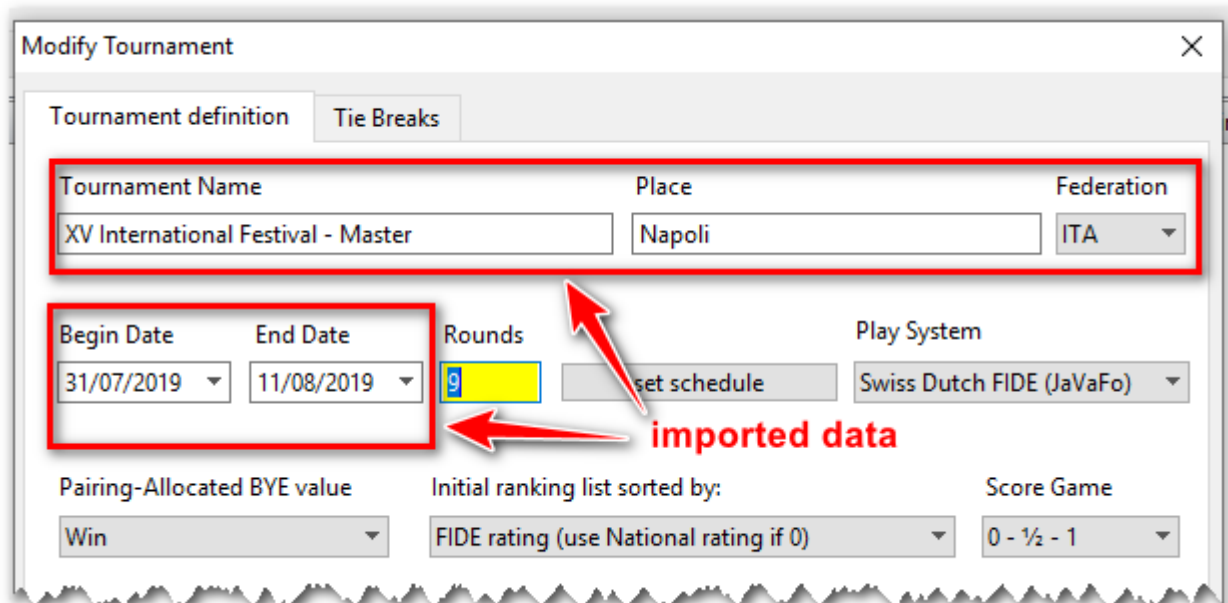
When the arbiter deals with an event that has many tournaments, it is easy to assign by mistake to the opened tournament in Vega the ID of another tournament already uploaded. If this happen the data on the server are overwritten. So the user should act carefully and have a clear idea of what she is doing. To prevent such errors, the tournament panel (see picture below) will list the tournaments that have already been uploaded with a coloured background.

3.5 Download registered players

Vega can import all registered players from the server by left click on the **Get players** button. The downloaded players should be later treated with the usual database option to update their info (rating, birth date and so on).

The National ID is imported only if the event is played in the same country of the player.
The players can be imported as far as the registration are not close in Vega.

3.6 Upload results to VegaResult

After the closure of the registration Vega can upload the tournament results to the server. This is done with the button **Publish to VR** in the bottom right side of the page **Round Manager.**
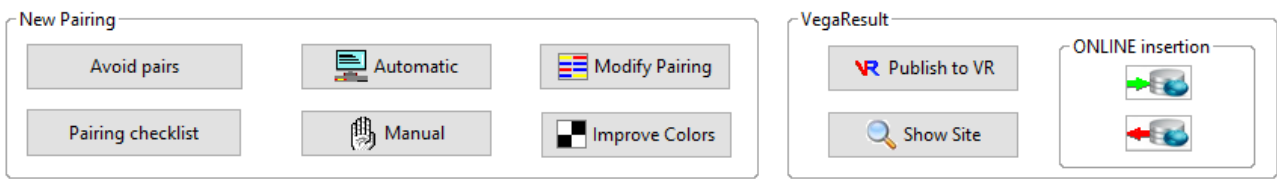
The button **Show Site** will open the browser at the url

http://www.vegaresult.com/vega/index.php?id=X

4. Vega for Team Tournament: VegaTeam

Most of the features described in section 2 are also valid for the team version. However, there are a number of differences that are covered in this section.

4.1 Creating a New Tournament

To create a new tournament, proceed as with Vega with **File → New Tournament** in the menu bar. A new form will prompt the user to enter essential information to define the tournament. In particular there are two new fields:

Boards is the number (max 10) of players that will sit at the tables to play.

Max Bo. is the total number of members in a team, i.e. it is Boards plus the reserves. The max value is 10.

Pairing score is the principal score used to rank the teams and to realize the pairing. The user has two possibilities:

- **Sum Player Results**. All points scored by individual players (0 for losses, ½ for draw, and 1 for wins) are accumulated.
- **Match Points**. Points 0, 1, or 2 are assigned to the team after each match. For example, if team A faces team B with 6 players with result of +3 =2 –1, then team A gets 2 points and team B gets zero points.

As far as the **Tie-break** is concerned, the user should be aware that Buchholz and Sonneborn-Berger systems are calculated over the **pairing score** selected from the drop-down above. Moreover, the *Av. Rat. Opp.* is the Average Rating Opponent and *Weighted Boards*, is a sum of individual results where each board is weighted by the following factors:

    1 board = 1.9
    2 board = 1.7
    3 board = 1.5
    4 board = 1.3
    5 board = 1.1
    6 board = 0.9
    7 board = 0.7
    8 board = 0.5
    9 board = 0.3
   10 board = 0.1

The Koya system is calculated with respect to the match points.

After creating a tournament, the user must provide information regarding teams and their composition in the **Edit Team** panel. The entry of a team is performed by filling in the fields **Team Name**, **Origin**, **Federation**, **Status** and clicking on **Add NEW Team**. The data is moved down in the team list and the overall rating of the team is assigned automatically as described below. Team

Name is the only mandatory field required to add a team.

The status flag may be in case of team available for the next round or in case of a team not participating to the next round.

To add a player, double click on a row and insert the data as usual. Each added team is assigned a rating calculated as the average of its first **Boards** players with the greatest rating (the position of a player at the table does not affect the average rating). For example, in a team of six players with rating: 2600, 2600, 2300, 2300, 2600, 2600, and **Boards**= 4, the average rating of the team is 2600.

The players can be sorted in different ways by simply clicking on the header of a given column.

To change a team that has already been added, the user should:
1. Select the team in the Team list.
2. Modify its data and eventually modify the player list.
3. Click on **Save Change** button.

To delete a team the user should:
1. Select the team in the Team list;
2. Click on **Remove Team**.

4.2 Closing the Registration

When the user has finished entering the teams, they must click on the **Close Registration** button to start the tournament. A unique pairing number is assigned to each team. Each player is assigned a unique number using the formula:

N_player = (N_team – 1) x 10 + B, where B run from 1 to 10

Thus the players, for example, of team with N=7 will numbered as 71, 72, 73, ... When the registration is finished it is not possible to delete a team or add a new one. Instead the user can only modify the present team.

4.3 New Pairing

The pairing is performed in the usual manner.

4.4 Entering the Results

The window is split in two parts. The top part shows the pairing amongst teams, while the bottom part shows the pairing amongst the corresponding players. The result should be entered into the **Insert board results** panel, while in the left panel **Team** composition the user can select the players participing in the next match.

VegaTeam will automatically move on to the next match when all players have got their results.
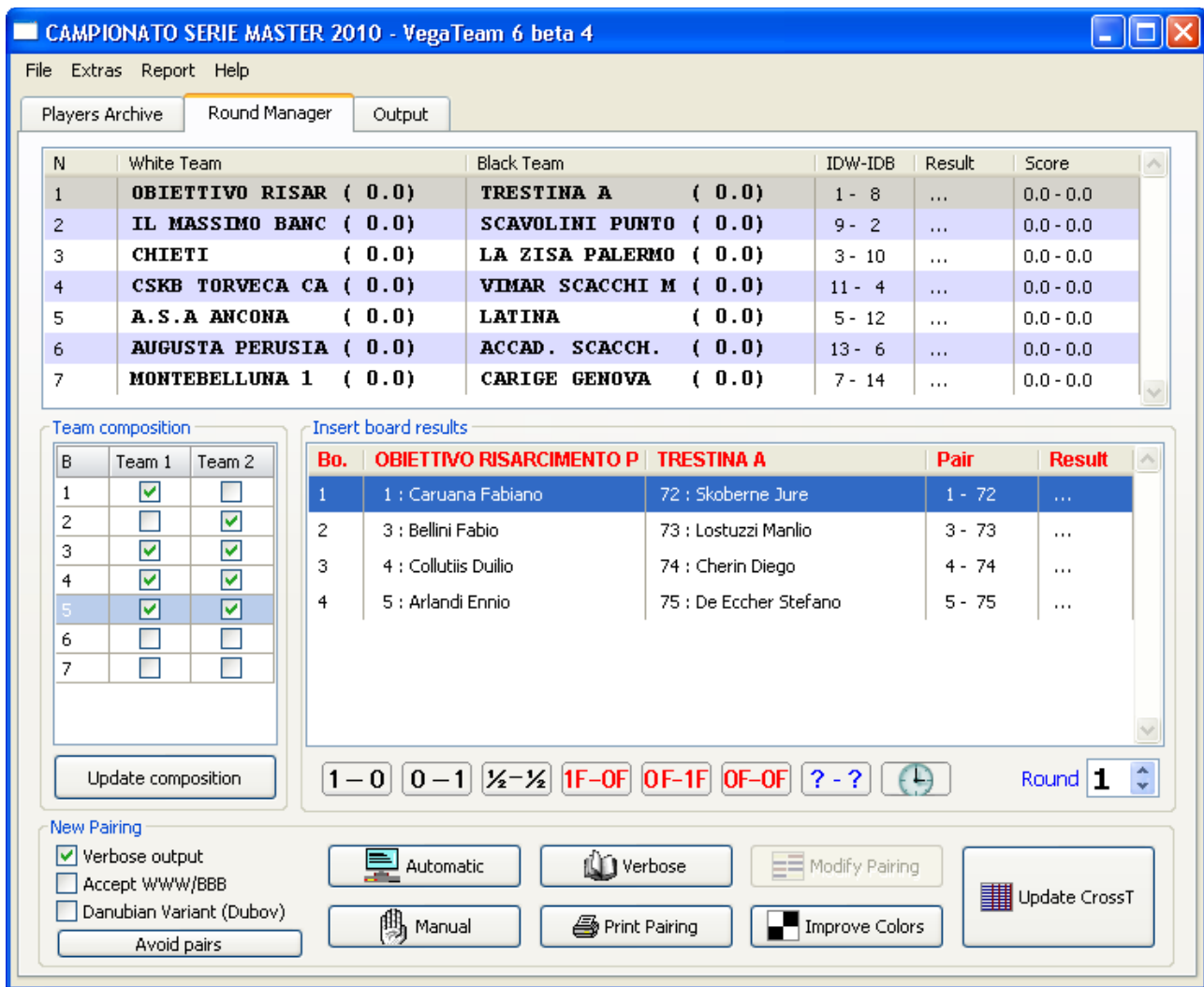
NOTE: In case a round contains an odd number of teams one of them will be paired with the BYE and the arbiter must assign appropriately each board result. In order to assign 2 match points against the BYE the individual results must be forfeited result.

4.5 Importing Players from a Formatted Database

VegaTeam can import players from any formatted textual database by using the option **File → Connect Database,** just as Vega does.
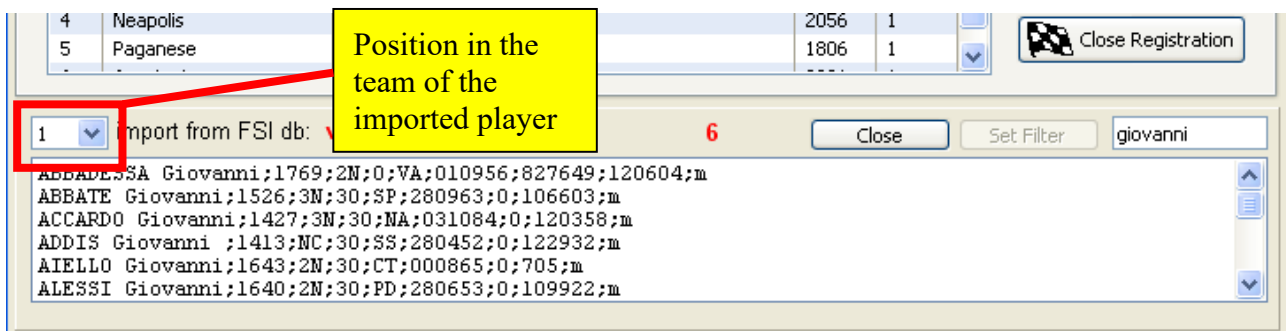
4.6 Extra/Add Team Preference Menu Item

This option can be used to perform automatic task during the insertion of a team. The user will be asked to check two boxes:

Sort players by rating: if checked the players are sorted with the highest ranked player at the top of the list. If unchecked the list remain as that made by the user.

Fill with fictitious players: if checked the rows left empty in the player list will be filled with dummy names. For example, if the team name is Thunder the players are named Thunder_1, Thunder_2, ... This option is useful in case the user wants quickly to run the tournament and only later wants to insert the real name of each player.

Appendix A: Frequently Asked Questions (FAQs)

1. May I have the source code?
No, sorry... maybe in future.

2. Can I exchange the colours of a pair?
Yes, of course. Just double click on the table that shows the pairing.

3. Why is the Linux version freeware?
I'm very indebted with the Linux community and this is a way to give something back. From other side Vega born under Linux. The cost of maintaining the code and provide the upgrades are covered by the Windows version most used by professional arbiter.

4. What I have to do if my tournament is made by many sections. It seems Vega can administer only one section.
Not at all! You can administer simultaneously how many sections you want... of course depending upon the memory capability of your computer. Vega can manage one section but you can run many sessions of the program at the same time and simply switch among them by using the Set Festival option.

5. I am not a registered user and I need your help. Can you answer me?
Yes, of course! Usually I answer within 12 hours from your email. If there is a delay it is because I am abroad or very busy. If you do not get an answer within few days, it is likely I have not received your email so please send it again.

6. Is there a software house behind Vega?
No. The author is a chess player, FIDE arbiter and organizer that knows very well what an arbiter really needs. The author is the first user of the program. For this reason the program is very cheap and there is no upgrade cost while it remains freeware for Linux.
However, if a TD needs a feature not present in the current version just let me know. I'll consider implementing it for free.

7. I would like to print/save the file players.html with the players sorted by national rating.
Click on the header column to be sorted in the player archive page then use the option **Print Players**.

8. Our organization is a no profit. Can we have a windows version for free to run our tournaments?
For school/no profit that cannot afford the cost of registration I am offering the Educational license at half price. It is identical to the windows one. Moreover, Linux can be installed on a cheap 8 GigaByte USB pen drive.

8. Vega does not recognize the draw. All the points made by draw are not reported in the output.
This may appear in some very old Linux distributions. It happens when the decimal separator is the ",". Please modify your environment and set instead the ".".

9. I'm not a registered user. Can I run the freeware Linux version under Windows/Mac OS by using an emulator/virtual machine?
No, it is not permitted.

10. How do I use the registration code? I do not see where I can enter the serial code.
Just save the registration file I sent you by email in the same directory of the executable (where the program has been installed) and run the program. That's all.

11. Can I run the registered version on both my desktop and notebook?
Yes of course. You can run it on any number of computers. It is only required that in a real tournament with more than 30 players the organizer or at least one of the arbiters has a valid registration.

12. Do you accept suggestions? I need this feature...
Yes, please let me know your request. I will implement it for free if it is of general use. I want to filter all requests to maintain the program easy to use and very intuitive. If you like programs with million options and not intuitive interface there are around many good software for you.

13. If I am running a tournament (60 participants), but with 2 categories (30 participants in each), is it possible to use the Windows version for free as it targets 2 separate categories and the number of participants is 30 and below per category?
No, it is not permitted.

14. Which Swiss system should I use for my tournament?
Here is short table showing the main features of the systems implemented in Vega:

System	Feature	Preferable if	To avoid if
Dubov	It tries to treat each player in the same way: In the same score group all players should have the same performance. If all are treated in the same way the stronger player should make more points to win the tournament. The player that plays on the first board it is not automatically favored in case of tie-break	There are many rounds (greater than 7) and the rating of the players differ by less than 200-300 Elo points.	The rounds are less than 8 or the rating of players differ by more than 200-300 Elo points.
Dutch	The priority is the rating. The player with a higher rating will face stronger opponents and in the case of a tie-break it has some advantage. It is the most popular pairing system.		On few rounds it could fail to produce an acceptable standings because of the floater treatment that is unnecessarily too obsessive.
Lim	The priority is the color. The player with a higher rating will face stronger opponents and in the case of a tiebreak it has some advantage.	There are few rounds and the color assignment is important.	
USCF	The priority is the rating. Two arbiters could produce different pairing but equally legal.	There are few rounds and the history of floaters is of no concern.	

15. How to set the result of an unrated game in Vega?
Before 2009 for the FIDE a game could be considered in two ways:
(a) played and rated;
(b) unplayed and unrated.
Since July 2009 a new possibility appeared and a game could be considered
(c) played but unrated.
(http://www.fide.com/fide/handbook.html?id=197&view=article)

> **5. Unplayed Games**
> 5.1 Whether these occur because of forfeiture or any other reason, they are not counted. Any

The case (c) appears when the player loses without performing the first move (for example when a mobile telephone produces a noise). The result appears on the cross table but does not produce rating variation. In this case the arbiter needs to insert an unrated result using the **NON standard result** button ? - ? . The unrated results arethose with "U". See also question 20.

16. In a round robin tournament a player withdrew before playing 50% of the games. How to delete all his games and ignore them during the calculation of the Sonneborn-Berger tie-break?
Set the player status flag to the red [**X**].

17. I have noticed that Vega does not operate correctly when the folder pathname contains non-standard characters.
This has been fixed with version 6. Vega had problems when the pathname of the tournament folder contained accented characters, space or sign as °ç@#€%&. Anyway, I suggest using only standard characters (no accent) to make possible moving the file onto different operative systems and not produce problem to the generated web site.

**18. Which Linux version do you use to develop Vega.**
Lubuntu. If you need to install Linux only to be able to run Vega I recommend you to install the latest version of Lubuntu.

19. I started a new tournament. I first entered a player as unrated and made the pairing. He was awarded a bye. Then deleted the first round, modified the player with a different rating, sorted, saved and made the pairing. In spite of the player having a rating, it still showed him as a bye (there are a few unrated players).
You sorted the players clicking the "Rtg. FIDE" header in the page 'Players'. That does not really affect the order of the player but only how they are displayed on the screen. The correct procedure to assign the new pairing number N to the players is from menu **Extras / Regenerate pairing number** and then performing the pairing.

20. How to insert a RATED non-standard result like ½ - 0 or 0 – ½.

This is easily made with the **NON standard result**button ? - ? that prompts the following window:
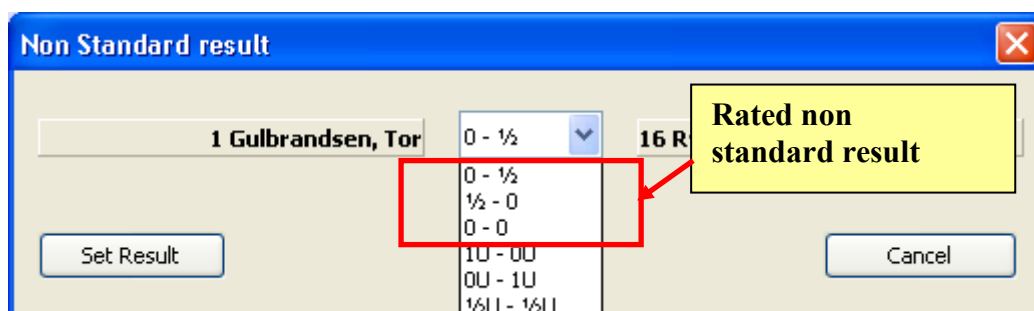
The first three results (without 'U' - Unrated) are the rated ones. The remaining results with 'U' are the unrated ones.

21. Can I realize a pairing forcing one or two pairs?

Yes, of course. First make unavailable the players you want to pair. Then make the automatic pairing. In it the unavailable players will be absent of course. Now choose the option Modify pairing and add those players to the pairing.

22. How does Vega calculate the Average Rating of Opponents for tie-break? Does it take in account unrated players and give just 0 for them?
Vega uses the player's rating for pairing purposes as described on page 7. If the player is both FIDE and national unrated then for pairing (and tie-break) purpose 0 is used. In this case the ARO is not a good tie-break (better the ARO cut 1). Moreover, the arbiter should set the rating at some reasonable minimum to let the Swiss system based on rating work properly.

23. I would like to import a document in Word but the .qtf files are difficult to handle.
The .qtf file made by Vega are already automatically showed by Vega in the **Output** tab page. If you want to import in Word just select the text you like in Vega and copy and paste in Word.

24. The FIDE unrated player entered the tournament with rating 0. This made the ARO calculation not reliable.
It is responsibility of the arbiter to set a suitable rating to a player for pairing purpose. You may set in the National Rating field his national rating and it will be used for pairing and ARO tie-break calculations.

25. I set five tie-break criteria but Vega shows only three.

The standings obtained via the button offers an elegantprint-out but is limited to three tie-break criteria. If you needto show all use the option that shows the standings in a text file.

26. I run Windows 7 as user. I created a tournament in the installation directory and JaVaFo (Swiss Dutch system) doesn't give me the pairing.
It is normal. Create the folder tournament OUT of that directory, like in c:\myTournaments. Moreover if the problem continues, enter your system as administrator, right click the Vega.exe file and set its property to run always as administrator. This is due to Java (JRE) not having the permission to write the output to the Program folder.

27. How to print the results of previous rounds?
In page "Round Manager" select the round you desire and then press the print pairing button.

28. How to modify the player card to put on the table?
The cards are generated using a template file in qtf format in the folder badgetemplate. Those files can be changed and new cards can be created. Use the built in editor (icon [W] in the output page) to open it and save.

29. In a big tournament it would be very nice to print a pairing file in which the players are sorted alphabetically

That file is already present. At round X it is named SortedPairsX.txt. You can load it in the Output page by clicking the yellow folder.

30. In 9 round Swiss tournament 16 players was playing in 8 boards. In round 4 three players didn't came and the tournament arbiter entered result as 1F-0F. Let's assume the player who came was 'A' and player who didn't came was 'B'. The result was player 'A' got a point. Again

in 6 round player 'A' was paired with player 'B' !!!?, and this time also 'B' was absent. This led to taking away the chance of player 'A' to actually score a point from a good player. And this was repeated again in 9 round for the third time!!!!!. It was very bizarre and no fairness for the Player 'A'. What was the actual reason for the Bizarre out come? Is it due to choosing 1F-0F instead of 1-0, or a software bug? Can you please clarify this issue in detail?

That behavior is quite normal and a rule for FIDE competition see D.2 of this document
http://www.fide.com/fide/handbook.html?id=84&view=article
This is because it was an unplayed game and that players never played each other. The behavior looked bizarre just because you had few players and many unplayed games. In normal circumstances no such things happen.

31. How to interpret the file that appears by pressing the checklist button in conjunction with the javafo Swiss engine?

That file is a sort of check list useful to check the pairing made by the javafo engine. The details are described here
http://www.rrweb.org/javafo/aum/JaVaFo2_AUM.htm#_Toc465604123

32. I can't get the first pairing from JaVaFo in a 64 bit computer with the installed Vega in 32 bit mode.
Please install the Java runtime at 32 bit. You must download it in offline mode because a 64 bit browser automatically will download a Java runtime at 64 bit.

33. The tournament I run used the FIDE rating as principal rating. However the national history card show still players with FIDE rating instead of the national one.
The National History card is based on the rating used for pairing purpose. In your case it was the FIDE rating. In case you run the tournament using the national rating then the history card will look as you expect. In other words, I do not recommend to show the history cards in your case.

34. How can I enable/disable the virtual opponent in Buchholz tiebreak?
The treatment of the so called "virtual opponent" is the default treatment in Vega and cannot be disabled, i.e. the unplayed games are always considered played against the virtual opponent.
What you can do is enable (default)/disable the adjusted score used for the unplayed games. For the FIDE the unplayed game is a draw. You can disable such option and consider for the Buchholz the real score at the end of the tournament. See this for more details
http://www.vegachess.com/tl/index.php/vo.html

35. I made a program able to calculate a new superduper tiebreak. Can I use it in conjunction with the User TieBreak in Vega?
Yes, you can. Vega saves and reads the user tie break value in the file usertb.txt. Look at the format of this file and just overwrite it with your program.

36. From version 7.4.0 I cannot longer set the result ½F-½F (forfeit draw) in a pair. What can I do to set it anyway?
That result is deprecated by FIDE and made invalid the rating report to FIDE. You cannot longer set ½F-½F (forfeit draw) in a pair**.** However you can assign ½ point BYE to the wanted players using the **Set player status option** before to do the pairing. In this way both players are excluded from the next pairing.

37. At round 4 a late comer joined the tournament and I regenerated the pairing number.

Vega signaled a warning although I didn't modify any rating.

It is normal. Vega does not know if you modified the players' data in the meanwhile and this could modify their previous relative order. Neglect that signal (for further info see section 2.9 regarding the pairing number).

38. Why there is all this concern about pairing number?

One reason is that to treat all players coherently during the whole Swiss tournament. In fact most of them are based on pairing number. The other reason is to permits to FIDE to check the correctness of the pairings and this is no longer possible if the pairing number are not stable during the tournament.

39. I have imported a tournament generated by another software by the option *File/Import Tournament in FIDE format*. Vega missed the actual score system used in that tournament.

Unfortunately, some relevant info is not contained in that file that is used for rating report.
In order to import properly a tournament in the FIDE TRF2016 format generated by another software, the user needs to create a new tournament with: score system and BYE allocated pairing set according that tournament. These parameters cannot be changed in Vega once the tournament is started.
The other tournament parameters: pairing system, move rate, tie breaks, etc… can be set after the file has been read via the **Modify Tournament** panel. Please note that the eventual acceleration cannot be retrieved.

40. How does work the score system "1 – 2 – 3"?

It is used in some scholastic tournament. It assigns 3, 2 and 1 point respectively to win, draw and lost. Only the absent players that forfeit his game get 0 point.

41. Can I add a QR code in the standings page?

Yes and it is very easy. There are many servers online that generate a QR code for free. For example here: http://goqr.me/ . With the following url
https://api.qrserver.com/v1/create-qr-code/?size=100x100&data=http://www.vegachess.com/OpenA
you get a QR code that scanned with a smartphone will give a link to
http://www.vegachess.com/OpenA .
Once you got you QR code, save the image in PNG format exactly as `qr.png` in the tournament folder. Now the pages containing the standings and the pairings will have a QR code on the left side. In case you want to remove it, simply delete the file qr.png or rename it differently.

42. I use Vega8/VegaTeam on Windows 10. Everything is OK but when I exit the program, I get a message saying "Error saving configuration file!". Moreover, I cannot change the language of the program.

This problem has been solved with version 8.1. Please upgrade the program.

43. I am using the database of the Swiss Chess Federation as a generic CSV archive and the filter Vega offer. I cannot import the players.

You need to use the csv archive prepared for Swiss Manager. Then you have to convert it to UTF8. Only now you can use the database and its filter.

44. Can I read with Vega 8 a veg file generated with Vega 7?

Yes, you can read it and show and print the standings and pairings. No other elaboration and/or export should be done (if done they could contain error!). So this procedure is limited to show older tournament of historical value and should not be done with running tournament.

45. I am not able to display the standings or the pairing. This is what I see.
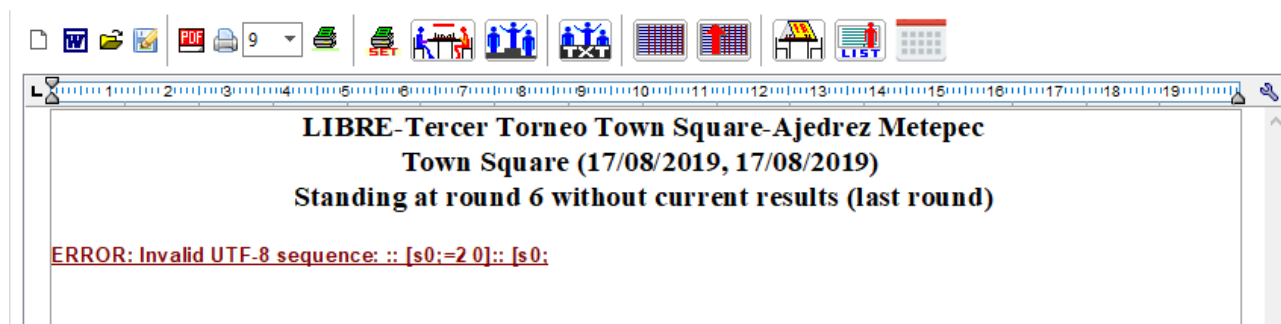
This is due to some strange character that entered in the name of some player. Vega can manage the database written in any languages if it is encoded in the so called UTF8 format. If the database is in some other encoding may happen what you see.
In your case the problem is caused by the unrecognized character at the end of player 27 (see picture below).

These characters are displayed as little square. Just remove it to fix the problem.
The menu **Extra / Name Utility / Check UTF8** name will check all players name and inform you which names contain intruder characters. Then you need to fix it.
Please remind that in the folder tournament there are the standings and pairing files in TXT format that are not affected by this issue. Moreover, the wwwfolder contains too the standings and pairing file that can be printed without problem.

Appendix B: Registration File and License

Anyone who uses Vega under Windows with more than 30 players (considering all tournament sections) needs a registration file. Before version 7 such a file was called **regcode.txt** and sent to the user. This file needed to be saved in the installation folder.

Since version 7 the registration file has a different format and it is called **serial.txt.** After buying it the file will be sent by email as an attachment**.**

For Windows: The user should save the attached file (without modifying or renaming it) in the installation folder and run the program. Alternatively the Windows user can use the following procedure that is valid only for Mac OS X (Mojave) users.

For Mac OS X:
    a) menu Help/License Manager
    b) load license (locate the serial.txt file and load it)
    c) save it (the file is saved in HOME/Vega with name serial.txt)
    d) close and run Vega.

Appendix C: How to prepare badge and place card with Word

It is possible to create badges and place cards automatically with data related to the running tournament. The following procedure has been tested with **Microsoft Word 2016**. Unfortunately, this description makes use of pictures taken from Word installed with the Italian language. So the user must be carefully to select the same option in his own language. Moreover, the user is <u>strongly</u> advised to follow on Youtube a short tutorial regarding the mail merge option offered by Word and then follow this tutorial.

Word permits to create automatically mails with data (name, address, telephone number, etc…) taken from a **database** (usually an Excel file). This is called the *mail merge* procedure. The Word document with the layout of each badge/card is called the **master document**. Thus, we need to create a master document and a database. In this tutorial, we want to create in a page of size A4 six badges 12 cm x 6 cm each. The page will be oriented in landscape mode.

1. Create the **database with Vega**: Open your tournament with Vega and export the players archive as a XLSX (Excel file):
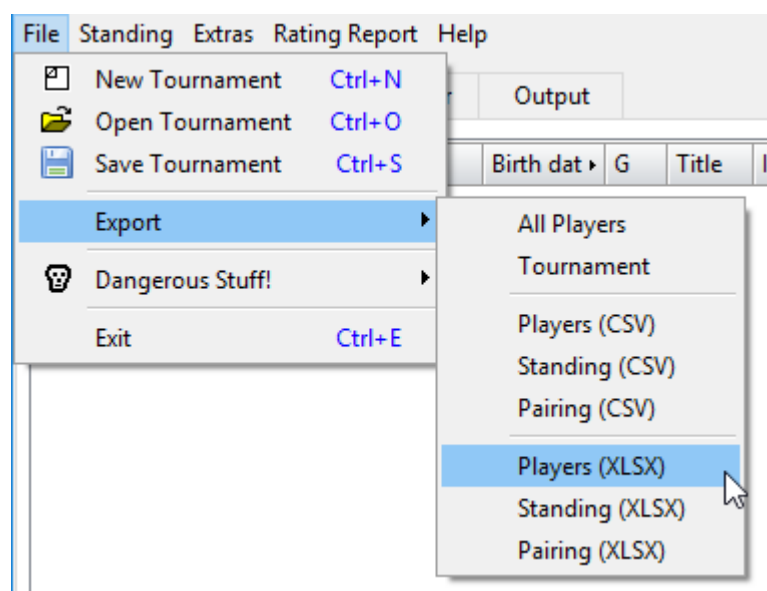
   In the tournament folder Vega will save the file `Players.xslx`. Moreover, Vega save a folder named BigFlag containing the flags of the players' federation.
   The previous file will be generated <u>ONLY</u> if the Excel program is already installed on the user's computer.

2. Create the **master document**: Create a new Word document, for example with name `master` and save it in the SAME folder where the file `Players.xslx` is. Now in the tournament folder are present the following files ([2])

---

[2] By default Word 2016 save documents with extension DOCX. If you have a previous version of Word, then you have to save the document in the <u>Word 97 - 2003 (.doc)</u> format (other formats have been reported to not work).
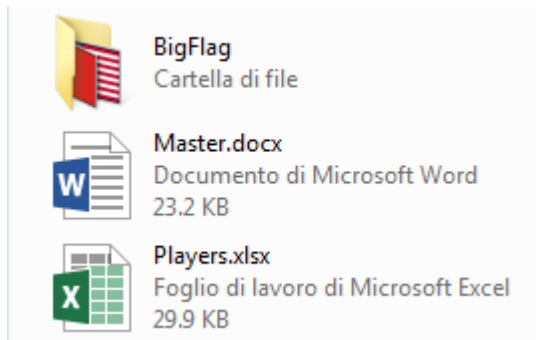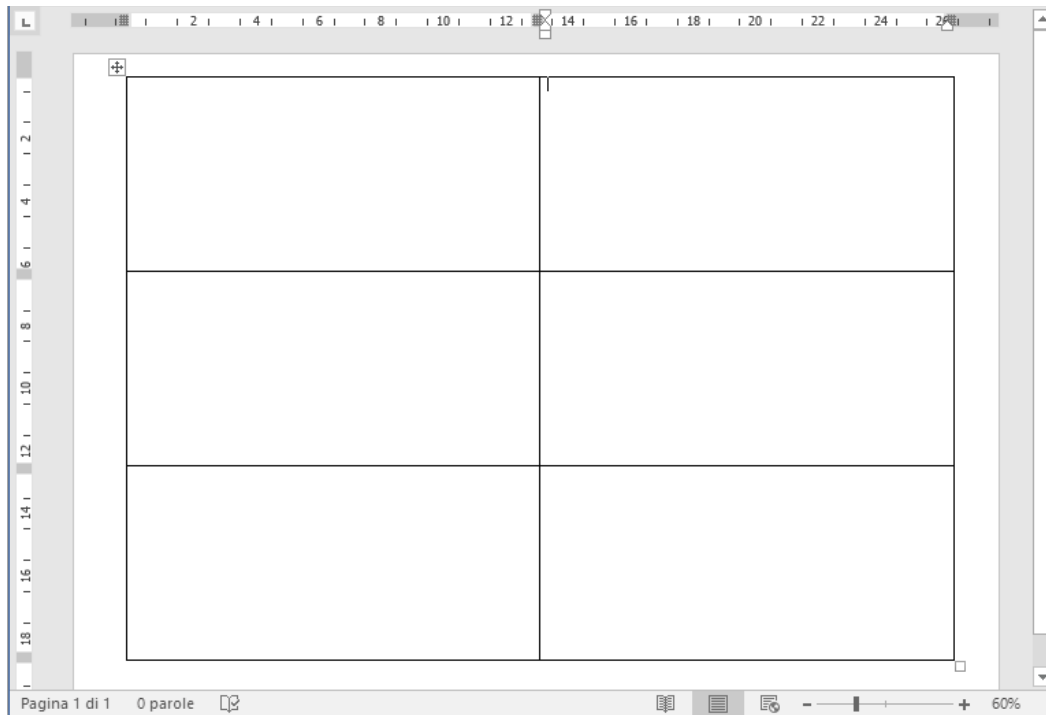
3. Select **Mailings / Labels**: in the master document select labels:
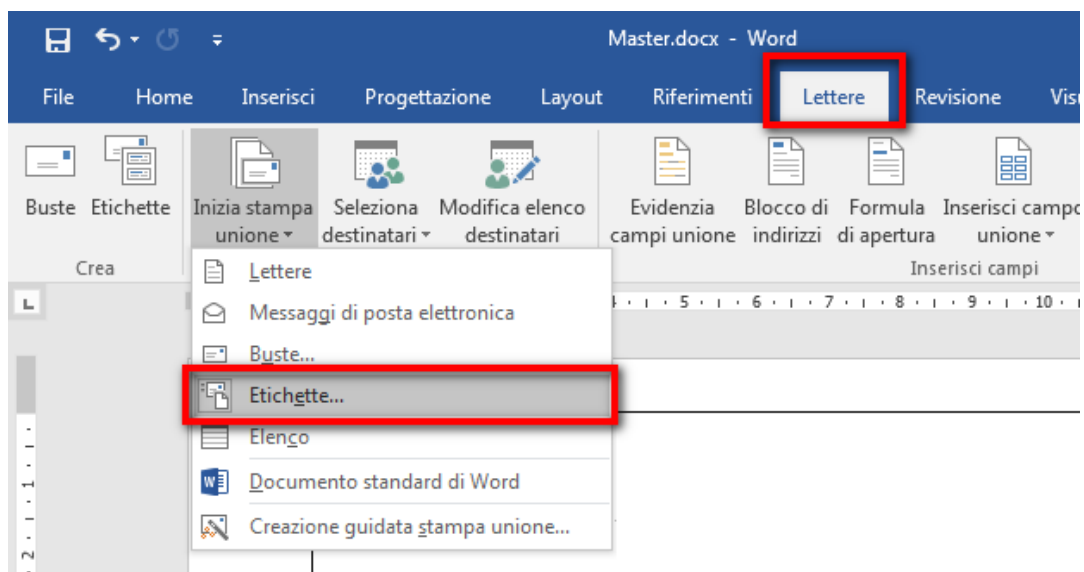
Word will ask to select a template for the labels but we just ignore its suggestion and close that window:
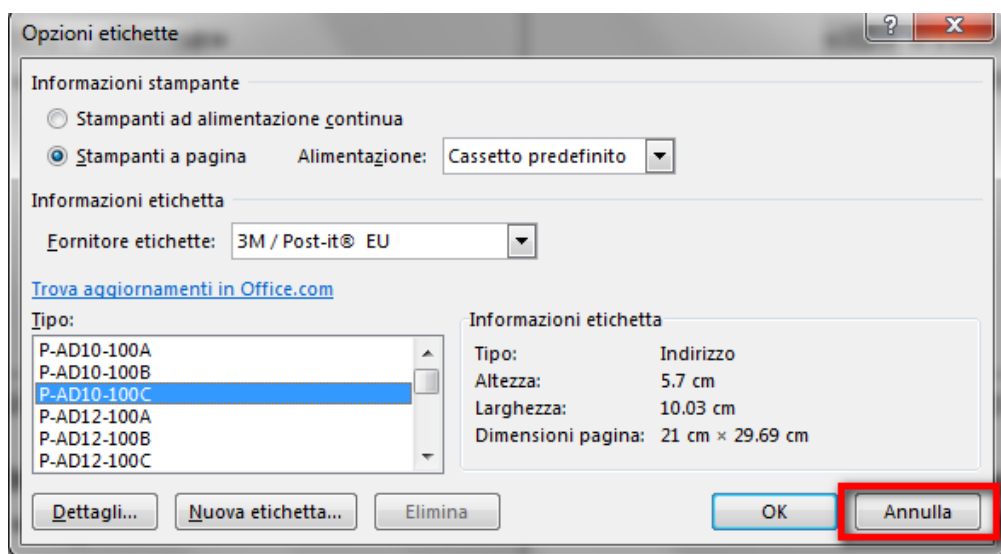

4. In the page (set with landscape orientation) of the master document the user must create a table with 3 rows and 2 columns having cells a little greater of 12x6 size:
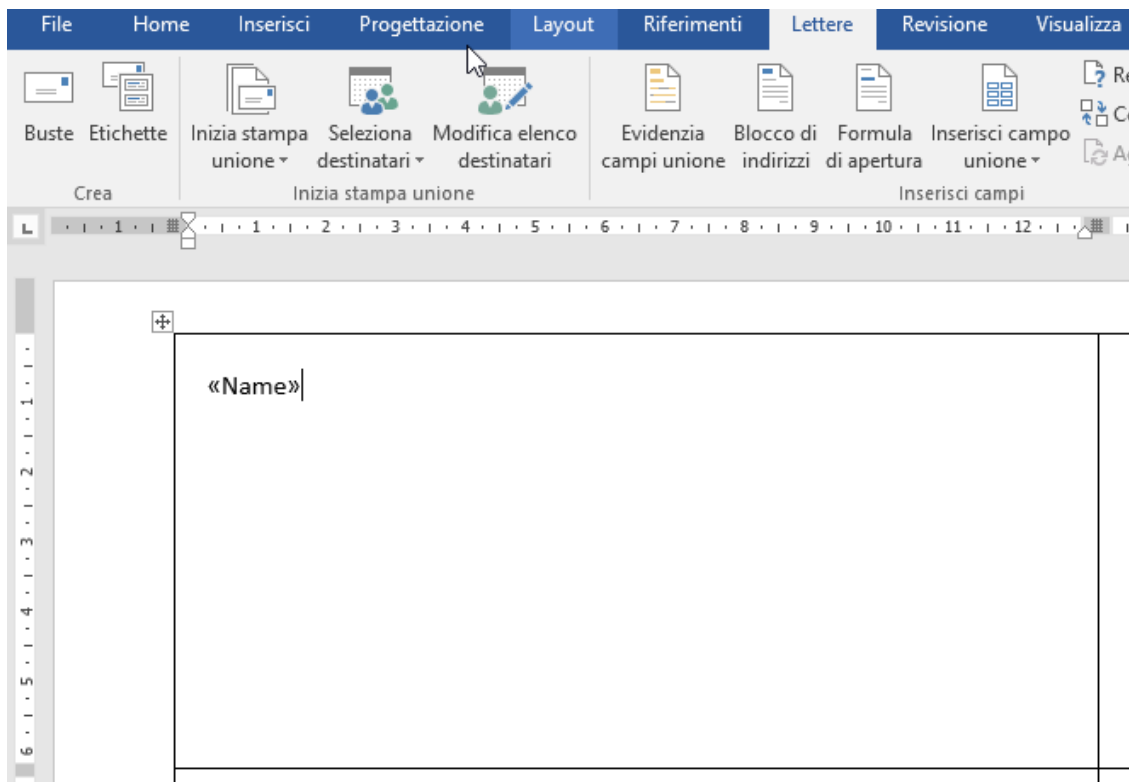
5. Connect the database, i.e. file players.xlsx, to the master document: **Mailings / Select Recipients / Use an Existing List** and choose the previous XLSX file:
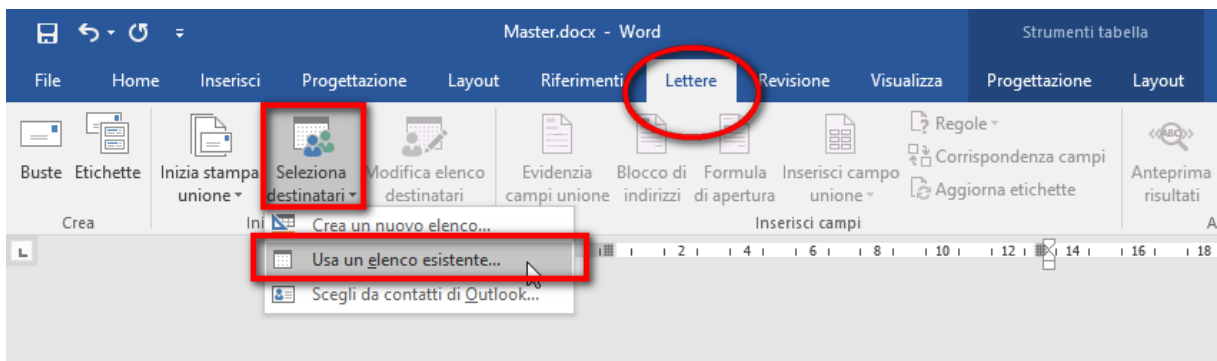
6. Create own badge: The user must work ONLY in the top-left cell and create his own badge. The following picture shows how to add the field Name containing the player name:
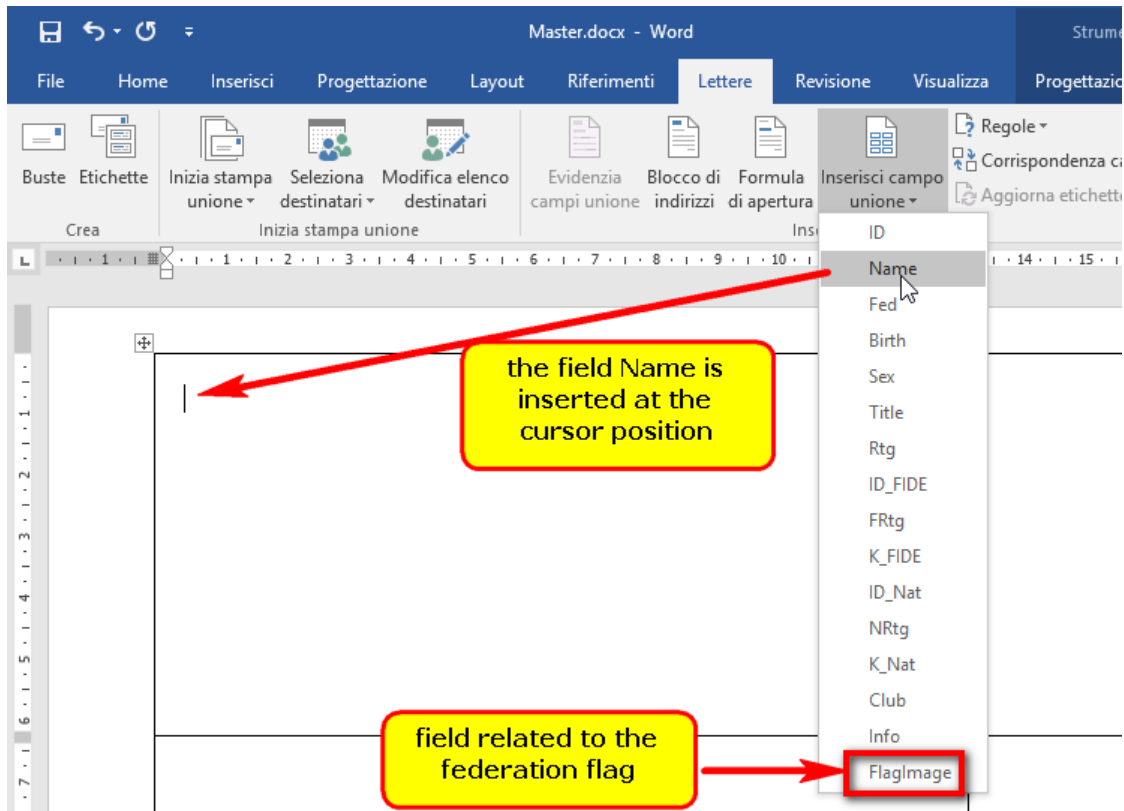
After the insertion the document looks like:

Other fields can be added in the same way. The user may add even some text and a logo. The following is a possible badge in which the <<field>> denote the place holder of the correspondent data:
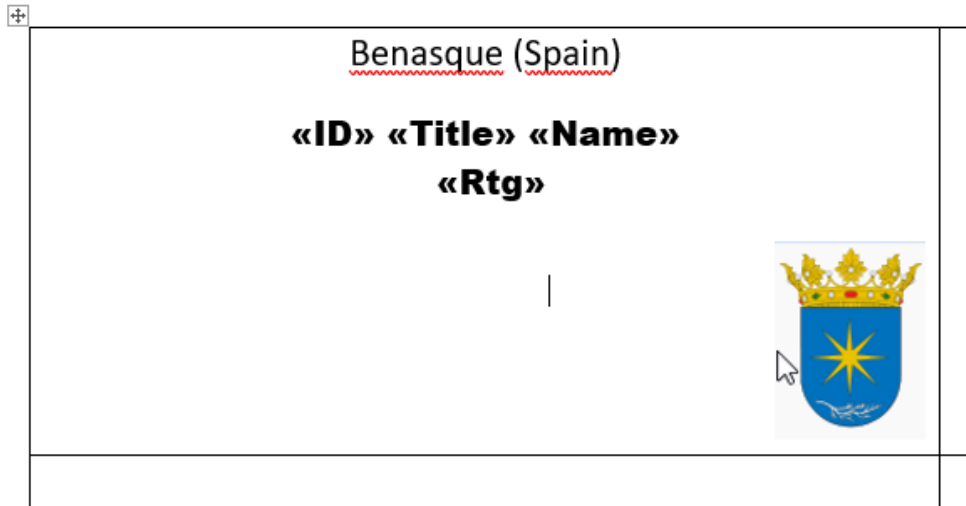
7. Add the federation flag: Put the cursor where the user like to have a federation flag and type **CTRL+F9**. A double curl bracket will appear. Within the {} copy and paste the following row:

INCLUDEPICTURE "" *MERGEFORMAT \d

Now the user should see something like this
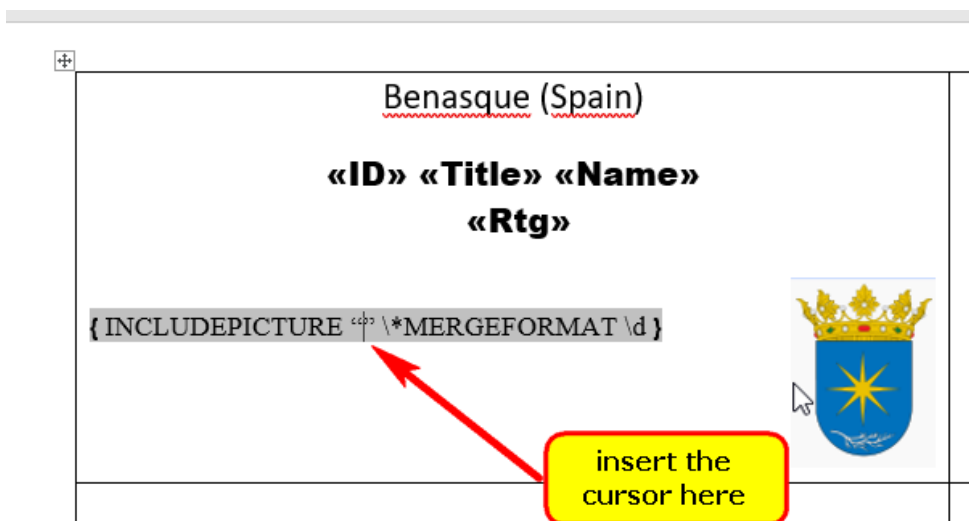
Leave the cursor inside "" and insert the field FlagImage as done with the other fields.
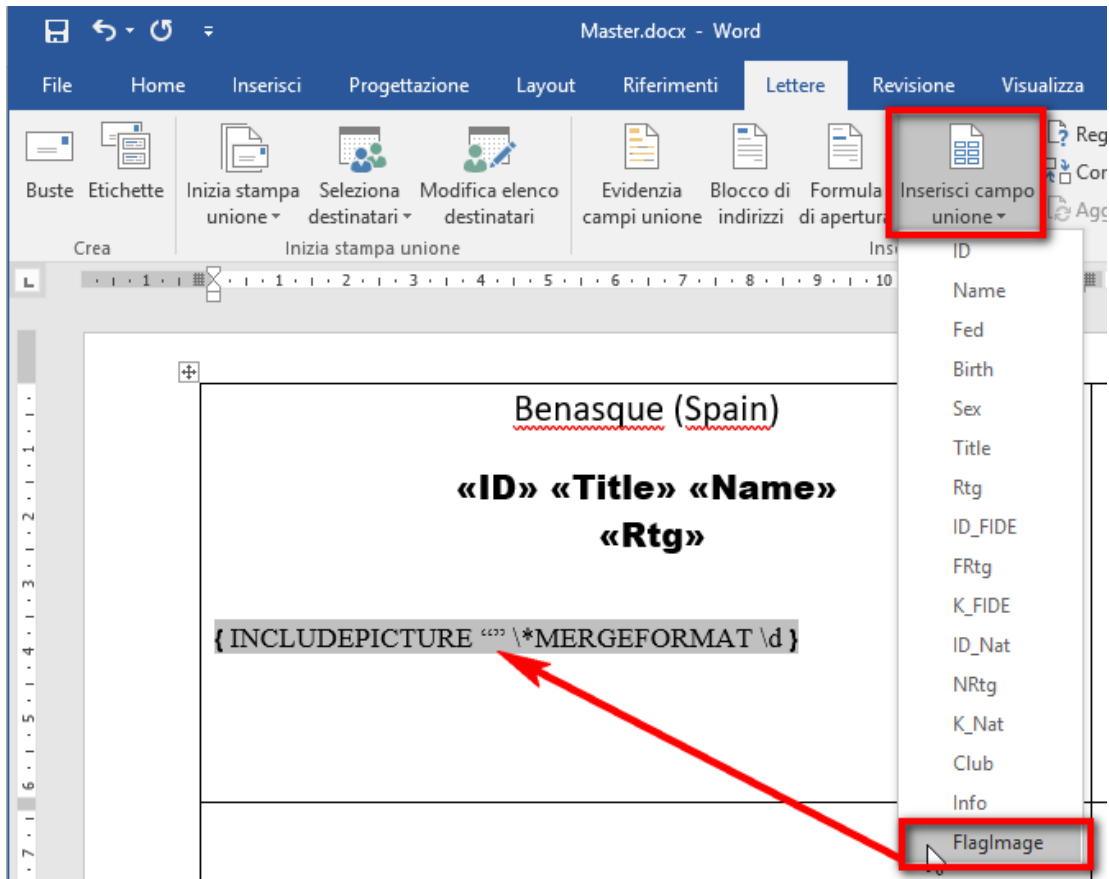
Now you should see:

{ INCLUDEPICTURE "{ MERGEFIELD FlagImage }" *MERGEFORMAT \d }

8. Press **Alt + F9** (the text related to INCLUDEPICTURE will disappear, so do not panic).
9. Run the **Mailings / Finish & Merge/ Edit Individual Documents**:
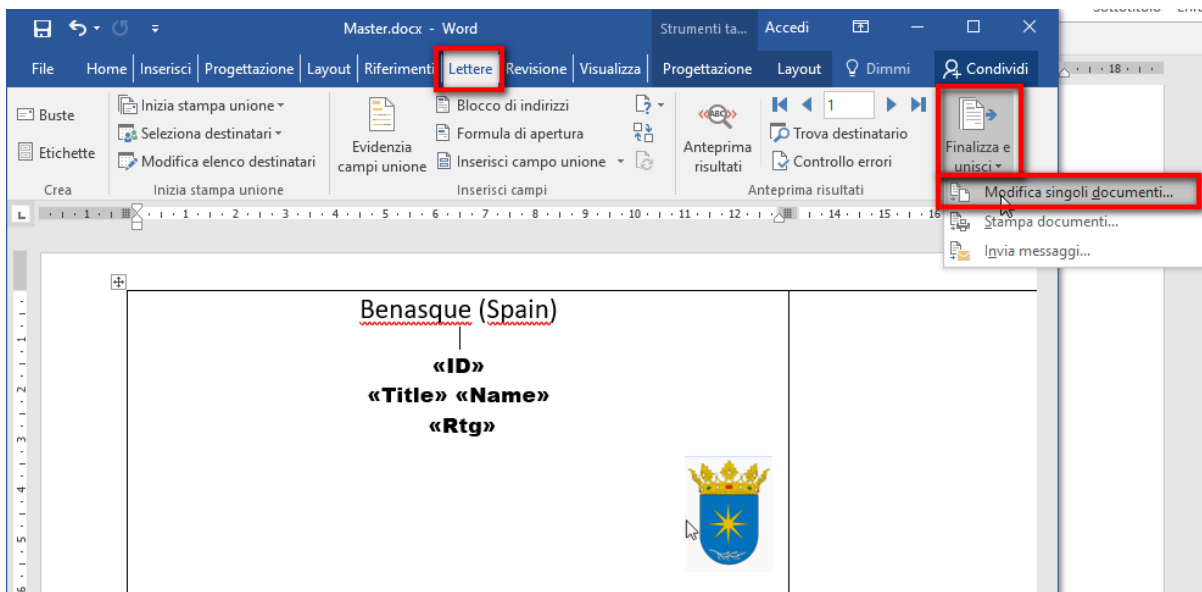
At the new window click "choose all" and press OK. Word will create a new document called **labels** with many pages but still NO flags appear.

Select the new created document. Press **Ctrl + A**; then press **F9**. Word will update all pages and replace the place holder by proper data and picture:
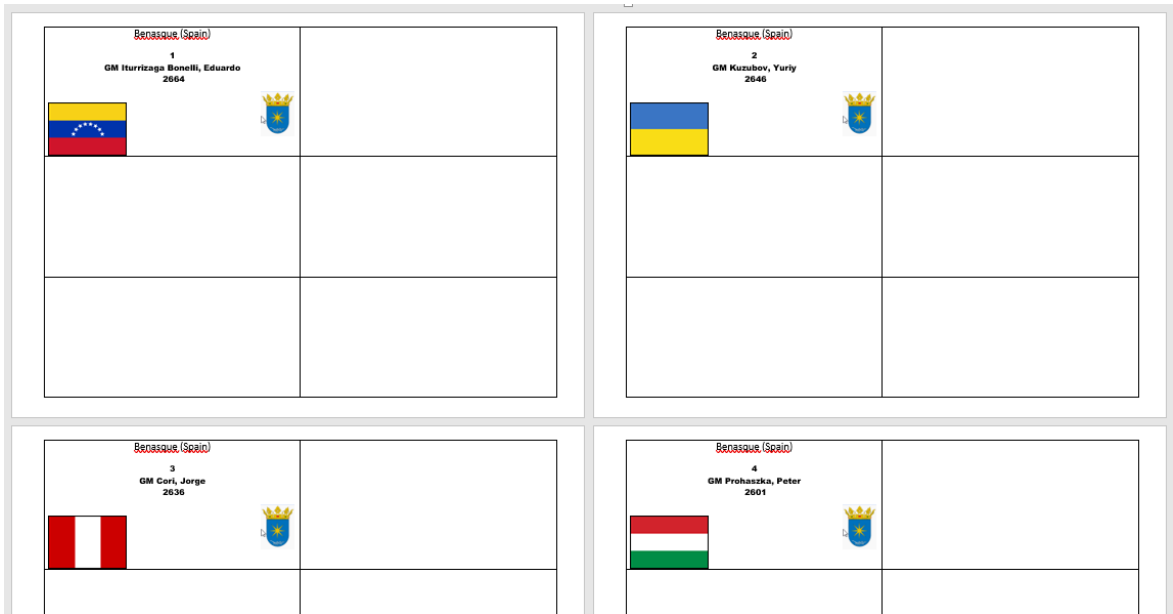
If the look is not satisfactory, the user can close the mail file and modify the position of the place holder in the Master document. To this end first press **ALT+F9** to show again the place holder. To see if the new look if OK repeat from step 7 until the wanted appearance is reached.

10. Fills other cells: when an acceptable badge is obtained we can fill the other cells.
    Close without saving the labels documents.
    Select the Master document.
    Press **ALT+F9** to show the place holder.
    Presse **Update labels**:
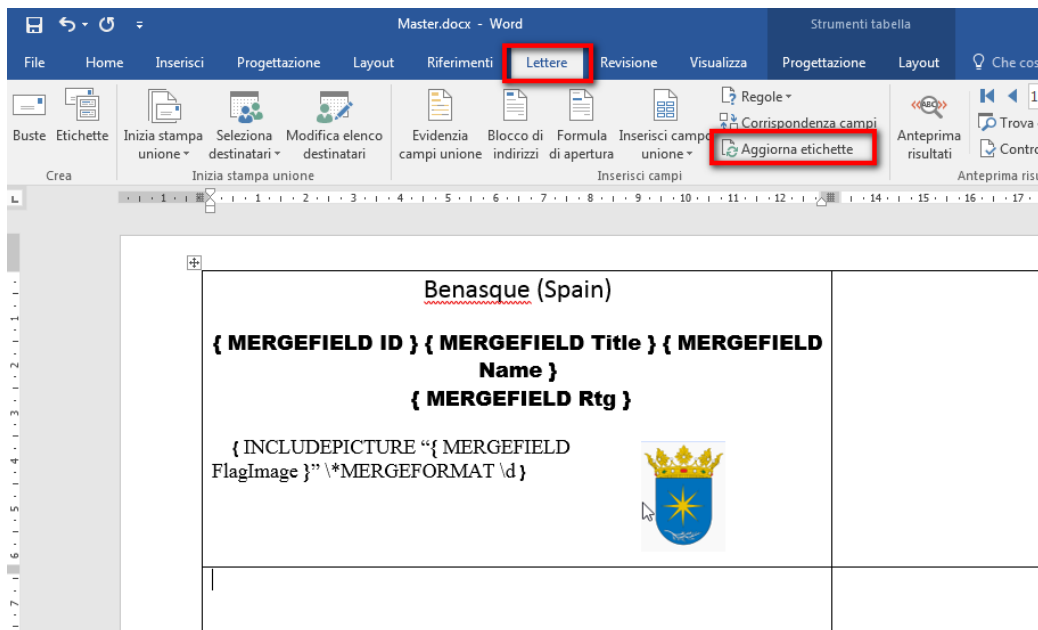
and the other cells fill be filled as the first one

11. Now repeat steps 8 And 9, i.e.:
     - press ALT+F9,
     - Run the **Mailings / Finish & Merge/ Edit Individual Documents** and choose all;
     - Select the new created mails document, press **CTRL+A**, press **F9**

   A new document ready to be printed with the wanted badges will appear:

Vega has two master documents situated in the installation folder
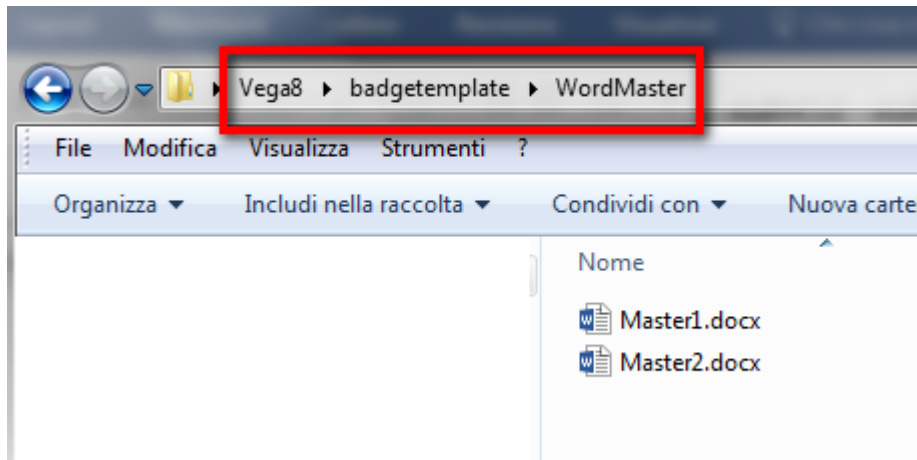
The user can use them as template. To this end the master document should be copied in the tournament folder (where the Players.xslx and BigFlag have been generated) and double click on it. A warning window will appear:
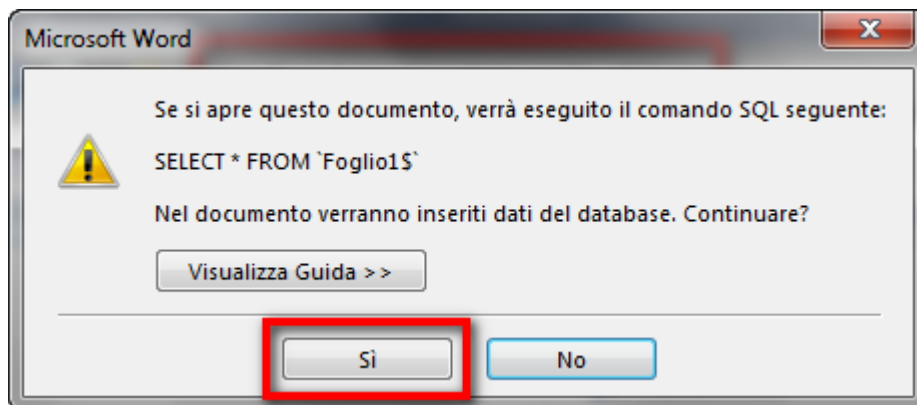
Then press Yes and choose the desired Players.xslx file.

Appendix D: Online insertion

The success of some tournaments depends by how fast is the process to collect the results and insert them in the computer where is installed the pairing program. Example of such a tournament are:
1) blitz tournament with several hundred players;
2) rapid games with several hundred players;
3) tournament played is different buildings but administered by the same computer.

Unfortunately, the way currently used to manage these challenging events are not very efficient and a not negligible time delay occurs between the end of a round and the begin of the next one.
The new **Online insertion** service help the organizator and/or the arbitral team to run a big tournament in a very efficient way reducing or eliminating the unwanted time delay between rounds.

The solution takes advantage of the available technology. The insertion procedure is moved from the only arbiter behind the pairing program to several arbiters that insert the results in real time via an online procedure. Each arbiter enters the results of his area in precise and accurate way when they are available.
The tool used to insert the results can be any device able to run a web browser and connected to internet in wireless. This means all current smartphones and tablets can be used and no additional cost should be sustained by the organization. The inserted results are saved on the server running the service, i.e. the VegaResult site.

Each arbiter will check only the results he has inserted. When all results have been inserted, the pairing officer will download them in Vega with one click and a new pairing can be done without delay!

This service can be useful even in other cases. Sometimes a tournament has several sections distributed in different buildings. In this case can be very useful to have a parallel insertion of the results. The pairing officer can download the results when they are available and publish them immediately. Thanks to this service the pairing officer can operate in a place very far from that of the tournament and manage all the aspect of the tournament remotely.

The service can be activated on a tournament already defined on VegaResult by the option **ONLINE insertion: Add Arbiter**

A new window will appear to define the arbiters enabled to enter the match results via web browser.
Each arbiter must be a registered user on the VegaResult site.

To enter an arbiter just specify her/his email address used for VegaResult site. Then press the button
Add arbiter to validate the insertion. The arbiter not yet registered are not accepted.
There is no limit to the number of arbiters that can be assigned to the same tournament.
An arbiter can be removed from the tournament after selecting it and then pressing **Remove
arbiter**. It is possible to manage the arbiters at any moment.

When a new pairing is done the user needs to upload it to the server. This is done in the page
Round manager pressing the button **Upload pairing**
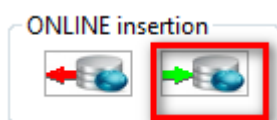
At this point the pairing is available online and the arbiters enabled for this tournament can enter the
results. When done the user can import the results with the button **Download results**
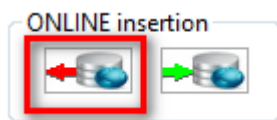
At this point the user can enter eventual missing results in Vega in the usual way and generate a new
pairing and uploading it as seen before.

5. Inserting the result online via browser
The arbiters that were assigned to the tournament can visit the web site

<div align="center">

http://www.vegaresult.com/vb/

</div>

using a smartphone or a tablet or any device supporting a web browser. A login page will appear

Here the arbiter needs to insert the username and password given at the registration and press **Login**. Then the pairing previously uploaded are displayed. In case the arbiter has been assigned to multiple tournaments a list of tournaments is displayed and he can choose one.

The options offered by this page are the usual offered by any web site that displays data in a table format.

On smartphones and tablets the table is shown in responsive way, i.e. it adapts the dimension to that of the device.

To insert or correct the result in a given board the arbiter needs to select the row belonging to the board. This can be done with the mouse left-click or tapping the screen depending by the device being used.

Then a new dialog will appear with the summary of the selected match. Here are shown three possible kind of results (rated, forfeited, unrated).
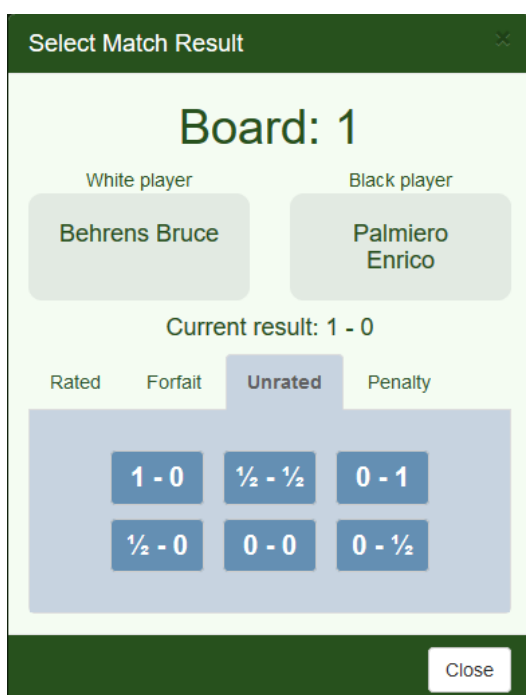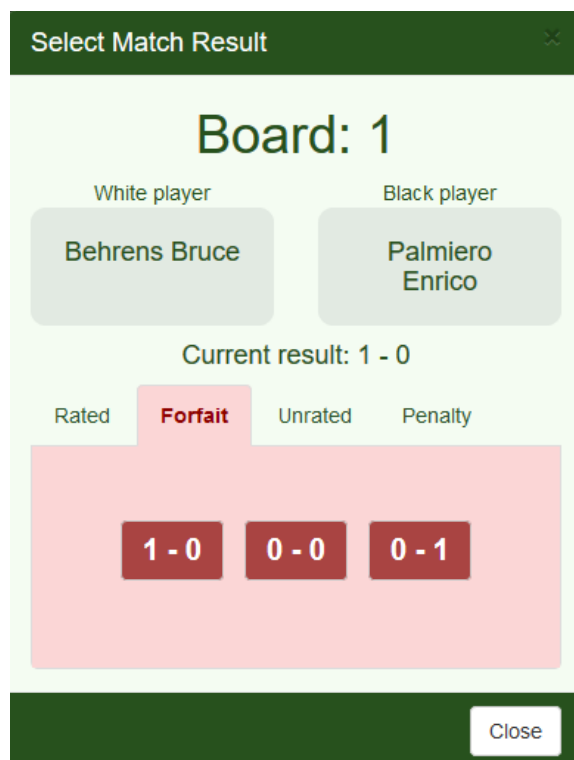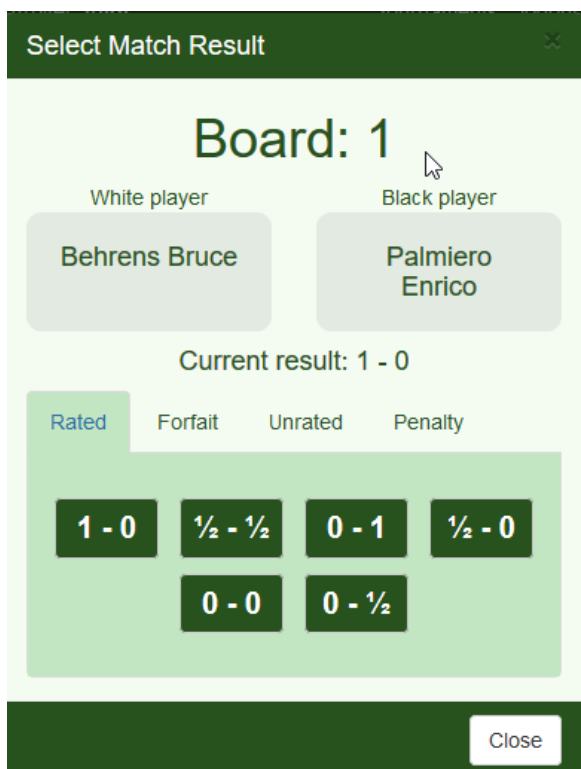
The arbiter can choose one of the available results pressing the correspondent button. Then the dialog result is closed and the inserted result is shown in the pairing list.

The insertion procedure can be complete or partial. In this last case, the user behind Vega will download only the inserted results and he must insert the remaining.

Moreover, a flag issuing a warning (for example in case of the first illegal move) can be added together a comment. The flagged player is signed with a yellow circle.

The service is currently free but the author reserves the right to make it available at a reasonable fee.

Appendix E: Generic Tournament Description File

The user needs to fill in the form (some data are the defaults and cannot be changed at this point)

Press **Done** to confirm and save the file tournamentname-city.tdf in the tournament folder. The report is not saved if there are still present adjourned game and/or unfinished games.

The format of the tdf file is similar to the FIDE rating report. But it has four more columns: national player code, national rating, origin and info field. The fields are separate by "|" instead of being fixed length. Each row begins with a three digit code specific of some kind of data. Some rows may be absent. Empty rows should be skipped.

The file has two main sections. One regarding the whole tournament, and another with the history of each player. Here is the tournament section.

    012 Tournament name
    022 City
    032 Federation
    042 Date of start
    052 Date of end
    062 Number of players
    072 Number of FIDE rated players
    082 Number of teams (in case of a team tournament)
    092 Pairing system (default is swiss system)
    102 Chief Arbiter
    112 Deputy Chief Arbiter(s)
    122 Allotted times per moves/game
    132 dates of the rounds separated by ";'
    142 points for game in format: W.W D.D
          respectively for victory and draw. Default is 1.0 0.5
    152 current round
    162 total number of rounds
    172 used tye-breaks code separated by ";"
    182 name of the accelerated system if used
    192 Program used for pairing

202 pairing allocated Bye value

From the point of view of a rating system, many of the previous rows are just useless and can be simply skipped if not needed. The reader can focus only for the rows of interest and be ready to continue to work even if some of the previous rows are absent or present and unwanted.
The following is a real example with the data Vega saves each time (the comments are in red):

```
012 1 Torneo km zero   Tournament name
022 Scalea             Tournament place
032 ITA                Host Federation
042 21/09/2017         Begin date
052 30/09/2017         End date
062 30                 number of players
072 12                 FIDE rated players
092 Individual: Swiss-System Dutch (JaVaFo)   Pairing system
102 AF Luigi Forlano          Arbiter
112                    an empty row
122 90 minutes + 30 s of increment for move   Time
132 17/09/22; 17/09/23; 17/09/24; 17/09/25; 17/09/26; 17/09/27; 17/09/28; date
142 1.0  0.5           point for win and draw
152 7                  current round
162 9                  Numbers of rounds
192 Vega 8.0.0   program name and version
202 0                  value of the pairing allocated BYE: 0 = win, 1 = draw
```

After the previous sections come the player section that is <u>mandatory</u>.
Each row contains specific player data to permit his look-up in the FIDE and National database, and his tournament history as well.
The row can be in any order although the one following the Startingrank-Number should be the preferred one.
The palyer row starts with the three digit code "001", then a space delimits a record in which the fields are separated by the delimiter "|".

```
Startingrank-Number  : 4 digit number
sex                  : "m" or "w"  (default is "m")
Title                : max three characters
Name                 : 32 characters
FIDE Rating          : 4 digit number
FIDE federation      : 3 characters
Origin               : 20 characters
Info                 : 30 characters
FIDE code            : 12 digit number
National Rating      : 4 digit number
National code        : 12 characters
Birth Date           : 10 characters
Points               : in the form  XX.X
Tournament Rank      : 4 digit number
Round 1              : see below
..............................................
Round last           : see below
```

Round Description

The results have the same format of the FIDE ones (TRF2016 format) separated by "|".

Appendix F: Swiss System with Progressive Acceleration

Objective: This variant of the Swiss system aims to better match opponents of approximately equal strength during an open tournament. The goal is to allow international norms during an open tournament where less than half of the players have a FIDE rating.

Principles of operation: When pairing at the start of the round, each player has a global score (GS), which is equal to the real score gained by play (RS) plus a fictitious score (FS) between 0 and 2:

$$GS = RS + FS$$

Rather than relying solely on fixed full-point fictitious offsets to separate the groups, this system awards additional half-points based on achievement during the tournament. This allows the groups to merge together more gradually.

Calculation of the fictitious score

Players are divided in 3 groups A, B, C on the basis of their Elo rating. Each group includes a minimum of 25% and a maximum of 50% of all players. Elo rating is used to limit the groups, which are decided by the arbiter before the start of first round. The groups may be set according to the prizes determined by the organizers. In general, group A includes players having an Elo rating greater or equal to 2000 points and group C includes players with an Elo rating of less than 1600 points.

Like the standard accelerated system, at the start of the tournament, players in group A have two fictitious points (FS = 2), group B one fictitious point (FS = 1) and group C no fictitious points (FS = 0).

When a player of either group B or C gains at least 1.5 real points (RS ≥ 1.5), their fictitious score is increased a further half-point. When a player gains their third real point (RS ≥ 3), their fictitious score is increased another half-point. Thus group B players can eventually attain the maximum of number of fictitious points (FS = 2).

When a player of group C gains at least 4.5 real points (RS ≥ 4.5), their fictitious score is increased by a half-point for the third time.

When a player achieves N/2 real points (where N is the number of rounds in the tournament), their fictitious score is brought to 2.

Before the penultimate round, all fictitious points are cancelled and the system becomes a usual Swiss system.

Summary table

Within each cell, the top number represents the real points and the number within brackets is the fictitious amount added in order to achieve the Global Score (GS).

The rightmost cells of the table consider cases with more than 11 rounds (they don't include groups A or B). Lower-case "n" in this case represents the number of rounds.

GS	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
Grp.A					0 (2)	0.5 (2)	1 (2)	1.5 (2)	2 (2)	2.5 (2)	3 (2)	3.5 (2)	4 (2)	4.5 (2)	5 (2)
Grp.B			0 (1)	0.5 (1)	1 (1)		1.5 (1.5)	2 (1.5)	2.5 (1.5)		3 (2)	3.5 (2)	4 (2)	4.5 (2)	5 (2)
Grp.C n=9	0 (0)	0.5 (0)	1 (0)		1.5 (0.5)	2 (0.5)	2.5 (0.5)		3 (1)	3.5 (1)	4 (1)			4.5 (2)	5 (2)
Grp.C n>11	0 (0)	0.5 (0)	1 (0)		1.5 (0.5)	2 (0.5)	2.4 (0.5)		3 (1)	3.5 (1)	4 (1)		4.5 (1.5)	5 (1.5)	5.5 (1.5)

Appendix G: Notes on the USCF Swiss Implemented in Vega

Vega implements all the USCF rules (*USCF Official Rules* - 5th edition 2003). However, the user should be aware of the default behaviour of the program.

1. At the end of the natural pairing Vega improves the colors using the "Look Ahead method". Vega saves in the text file colorlogN.txt (N is the current round) all the switches made during the application of the look ahead method. The following are typical messages referred to the natural pairing:
...
Done Transposition between pairs 1, 4
[1] R80 = 0, R200 = 1: D_trans = 54, D_inter_1 = 442, D_inter_0 = 73

Done Interchange between pairs 2, 8
[4] R80 = 0, R200 = 1: D_trans = 124, D_inter_1 = 59, D_inter_0 = 343
...
The meaning is:
R80: is 1 if can be applied the 80 point rule, otherwise is 0;
R200: is 1 if can be applied the 200 point rule, otherwise is 0;
D_trans: rating difference of the transposition between the pairs;
D_inter_1: rating difference of the interchange A<=>D, in the pairs A-B and C-D; D_inter_0: rating difference of the interchange B<=>C, in the pairs A-B and C-D.

2. The <u>unrated players</u> in Vega are the players with <u>rating exactly equal to 0</u>. The unrated are treated differently by the USCF rules with respect to the BYE and the odd player determination. All the players with rating greater than 0 are instead treated in the same way by Vega. Thus, if the Tournament Director prefers to give to the unrated players the highest priority to be the odd player, the TD should simply assign to them a minimum rating <u>different from zero</u>, for example 1.

Appendix H: Additional Notes for the ECF Tournament Director

Vega is configured to make use of two alternative ECF databases:

a) The CSV database that can be downloaded from ECF web-site http://www.englishchess.org.uk/ . This database can be selected by pressing Set DB on the **Players Archive** page and choosing **archive ECF** from the list of predefined databases. It is not necessary to specify a data filter as this is pre-loaded.

b) The ECF master list (if available). This is usually supplied in dBase (.dbf format), but can be opened with Microsoft Excel (for example) and saved again as a text format (.csv) file. Before saving the text format file it is necessary to set the field delimiter as ';' instead of ',' . The appropriate data filter is set by clicking **Set Filter**, then **Load Filter** and choosing **MasterListECF** from the list of available filters.

In order to produce the appropriate ECF rating report, a tournament director should be aware of the following:

a) The **ID NAT** field of a player should be filled with the exact code found in the database of the ECF. If the player is not yet graded and he is not present in any database, the **ORIGIN** field must be filled with the club code of the player (it is a 4 characters long). If **both ID NAT** and **ORIGIN** fields are empty then the ECF Checker program will flag an error.

b) The **report** is generated by using the menu item **Report→ECF→Process current section** and filling in the following form:

Once complete, clicking on **Done** will generate a file by the name of ECFResults.txt, which is to be fed to the ECF Checker program.

Appendix I: Buchholz and Sonneborn-Berger Tie-breaks for Unplayed Games

As far as the Buchholz and Sonneborn-Berger system is concerned, Vega follows the rule of 80th FIDE CONGRESS 2009 Kallithea, Greece – Minutes of Swiss Pairings Programs Committee Meeting:

7. Handling of unplayed games in Swiss tournaments

The committee agreed unanimously to handle unplayed games in Swiss tournaments as follows:

There are two points of view:
a. For the player himself who gets a result by default or is absent
b. For the opponents in other rounds of the player who gets a result by default

a. The new style Buchhloz uses a virtual opponent to calculate the Buchholz score for a result by default. A virtual opponent has the same points at the beginning of the round and the result by default of a player is treated as a normal result, so a loss by default (by absence) is a win for the virtual opponent and vice versa. For each next round the virtual opponent gains half a point.

b. For reducing the consequence for the opponents when calculating Buchholz, each result by default of a player is counted as a half point (draw) for the Buchholz of the player's opponents.

Examples:

1. In a 9 round swiss the player A achieves 6 points including a default win in round 3. After round 2 A had 2 points score.
The contribution of round 3 for A is $2 + 0 + 6 \times 0.5 = 5$ points Buchholz
The contribution of A for his opponents' Buchholz is 5.5

2. In a 9 round swiss the player B was absent in round 7 and scored 6 points after round 9. After round 6 B had 4 points.
The contribution of round 7 for B is $4 + 1 + 2 \times 0.5 = 6$ points Buchholz
The contribution of B for his opponents' Buchholz is 6.5

NOTE: The previous example apply only to Buchholz calculation. In case of Sonneborn-Berger the player that lost to forfeit get no tie-break points (http://www.chesscafe.com/text/geurt174.pdf pag 4).

In Round Robin tournament the unplayed games are considered as really played (http://www.chesscafe.com/text/geurt176.pdf pag 1).

The user can choose whether to adjust the score of the unplayed games (consider them as draw) before applying the Buchholz and Sonneborn-Berger. This is done via the **adjusted score for Buc and S-B** checkbox.

Appendix L: Zermelo Score System

The method of paired comparison has been applied to chess tournaments. The model used is that proposed by Davison and Beaver [1] and has been implemented in Vega as a supplementary tool able to provide a new, fairer standings at the end of a tournament. The proposed score system in Vega is named Zermelo score system after the first scholar who proposed the method. In fact, historically, the method was created with chess as the main application.

There are situations where a set of objects is to be evaluated on the basis of responses obtained when the objects are presented in pairs. This method is known as method of paired comparison. It has been used in contexts as marketing research, taste testing experiments, and other sensory discrimination studies for which the responses to the objects are a function of a complex physiological process. Moreover in several sports the competitors are ranked on the basis of their performance when they meet in pairs. Chess is one of them.

Using the paired comparison method of experimentation, each pair formed from a set of m objects is presented to a respondent who is asked to indicate a preference for one member of the pair. It is assumed that the responses to the objects can be described in terms of an underlying continuum on which the "worths" of the objects can be relatively located.

Translating the previous words into chess language is rather easy. The tournaments, both Round Robin and Swiss systems, produce natural paired comparisons at each round and the response is just the game result. We assume the game result depends on the player strength denoted by γ.

Given two players, i and j, with strenght γ_i and γ_j respectively, for the ordered pair (i, j), i.e. with i playing with white pieces, we have the following formula

$$P(i \to j \mid i,j) = \frac{\gamma_i}{\gamma_i + \theta\gamma_j + \nu\sqrt{\gamma_i\gamma_j}}$$

$$P(j \to i \mid i,j) = \frac{\theta\gamma_j}{\gamma_i + \theta\gamma_j + \nu\sqrt{\gamma_i\gamma_j}}$$

$$P(j \approx i \mid i,j) = \frac{\nu\sqrt{\gamma_i\gamma_j}}{\gamma_i + \theta\gamma_j + \nu\sqrt{\gamma_i\gamma_j}}$$

where $P(i \to j \mid i,j)$ is the probability that i beats j, $P(j \to i \mid i,j)$ the probability that j beats i, and $P(j \approx i \mid i,j)$ is the draw probability. The parameter $\theta > 0$ is related to the colour ($\theta > 1$ means that player playing black has advantage, $\theta < 1$ means that player playing white has advantage, $\theta = 1$ means that no coulours bring advantage to the players). The parameter $\nu \geq 0$ is related to the draw preference ($\nu = 0$ means that draw is not possible). Both θ and ν are unknown and must be determined together the γ_i.

The task to calculate the unknowns is performed via an iterative procedure described in [1] and implemented in Vega. Moreover the user has some possibility to tune the parameters.

Option: Zermelo Score System

With this option the procedure is applied looking for γ_i but setting ν=0 and θ=1 as in the original

Zermelo paper. The γ_i are in the 'Z Pts' column. The column 'ZN Pts' is the same of 'Z Pts' but with the greatest γ_i set to 100. The method does not broken the tie in a round robin tournament and is not particularly useful in this case because the ranking is the same of score percentage. In Swiss systems it turn out to be much more useful.

Option: Zermelo Score System Extended

With this option a panel prompts the user to choose how to perform the calculations:
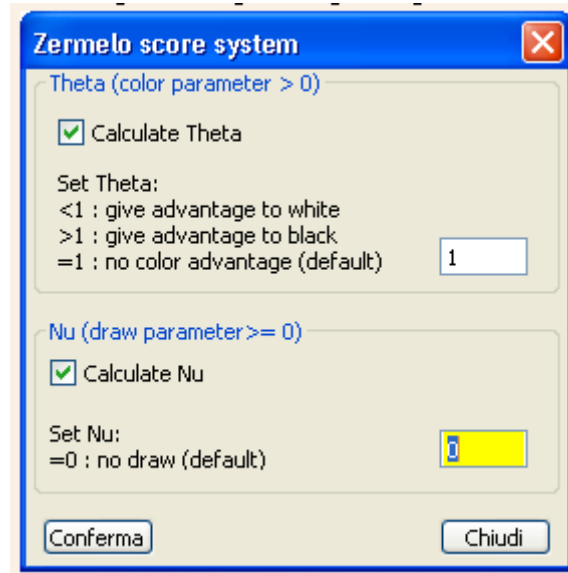
The user may ask to find both parameters ν and θ or set one or both to some value.

Reference
[1]: On Extending the Bradley-Terry Model to Incorporate Within-Pair Order Effects, Roger R. Davidson and Robert J. Beaver Biometrics Vol. 33, No. 4 (Dec., 1977), pp. 693-702

Appendix M: Random tournament and tournament validation

Vega (only Windows version) can be used to generate Swiss tournament with Dubov system. The output format is the FIDE exchange TRF2016. Vega can even import this file and check if it is compliant to Dubov system rules.
The installation folder contains two files that make easy to generate and check many files at once.

File **generate.bat** :
Contains the command

```
FOR /l %%i in (1,1,100) do @Vega8.exe -g PATHFOLDER
```

that generates 100 random tournaments in the folder `PATHFOLDER`.

NOTE: (1) The string PATHFOLDER should be terminated by "\" and specified by the user.
(2) It should not contain blank space.
(3) The folder containing the generated tournaments should already exists.

An example of correct input to generate 100 tournaments is:

```
FOR /l %%i in (1,1,100) do @Vega7.exe -g C:\Users\luigi\vegatornei\bbb\
```

Instead of 100 the user can input any number.
Here is a typical filename of the tournament generated by Vega:

FIDE-TRN-50-12_162147026.trf

where 50 e 12 are respectively players and rounds of the generated tournament; then follow the time stamp in the format hh-mm-ss-milliseconds.
The following are the default values used by Vega to generate sensible tournaments:

Number of players : [15, 215]
player rating = [2000, 2600]
number of rounds : [7, 15]
probability of forfeited game = 0.02
average number of retired players = players*rounds/250
average number of ½ point bye given two rounds before the last round = players*rounds/150
game result = probability according to the player rating difference.

File **check.bat** :
Contains the command

```
for %%f in (PATHFOLDER\FIDE-*.trf) do @Vega7.exe -c "%%f"
```

that will check all files starting with word "FIDE-" and ending with ".trf". Here is a valid example:

```
for %%f in (C:\Users\luigi\vegatornei\bbb\FIDE-*.trf) do @Vega8.exe -c "%%f"
```

Vega will check the pairing in reverse order: from last to the first. When done Vega saves the file **checker.txt** with the details of the comparison.

Appendix N: Adding an External Pairing Engine

Vega permits the addition of a third-party pairing engine (it can be freely made by anyone). The executable must reside in the **plugin** folder under the installation folder. To add the engine, select the menu item **Extras → Add External Pairing Engine.** Vega will show the following window:
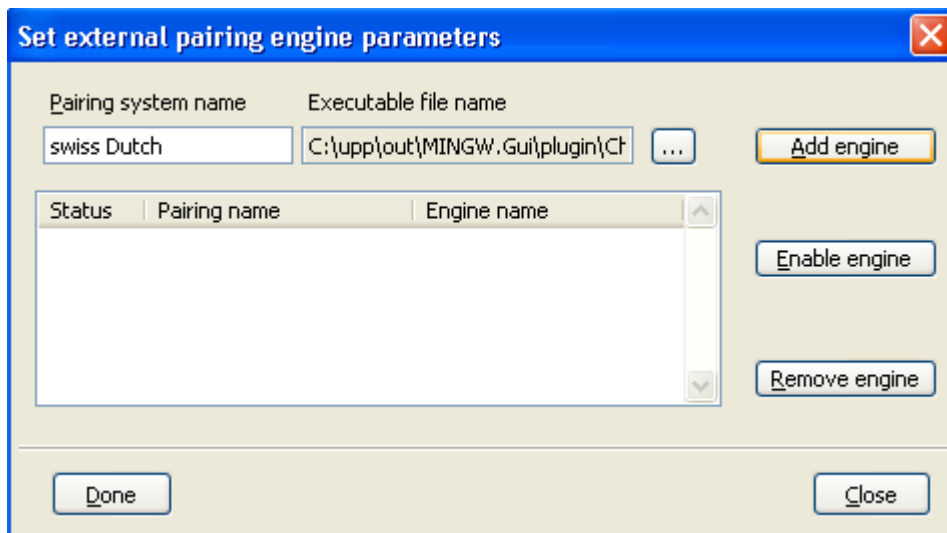

The user should enter the name of the pairing system, the full path of the executable, and then press the **Add engine** button.
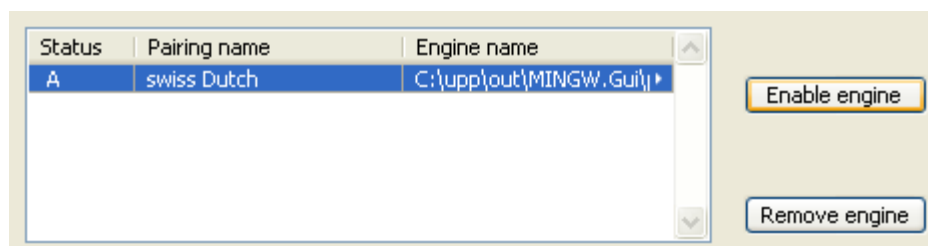
There can be several engines but only one can be used at time. To choose one of interest, the user needs to select one of them, press the button **Enable engine** (an 'A' will appear on its left side), and then click **Done**.

In order to use the external engine the user should select it during the definition of a new tournament.
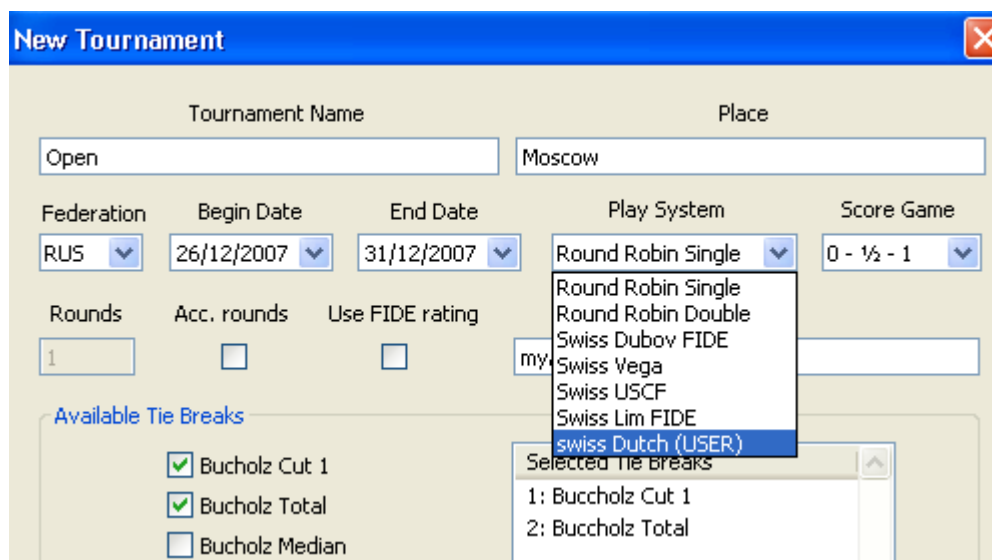
At each round Vega runs the executable engine with the following command:

```
$> engine_name  tournament_path  file_name.trfx
```

Where `tournament_path` is the path of the tournament folder, and `file_name`.trfx is the file automatically generated containing the tournament data. In this way the engine is correctly addressed where the important tournament files are with appropriate parameters.

> *NOTE: It is recommended that the tournament_path does not contains blank space or unusual characters to prevent the engine to work correctly.*

> *NOTE: It is responsibility of the extern engine to retrieve all the relevant tournament data from the trfx file saved by Vega in the tournament folder. The engine must save all its output in the tournament folder.*

Vega expects from the engine a file that at round N should be named as **engine.man** containing the pairing at round N in the following format: a first row with the number of the pairs, and for each successive row, the IDs of the player of each pair. This is a typical *.man file containing 5 pairs:

```
5
5    2
17   10
16   13
8    11
9    3
```

(the BYE has ID=0). If this file exists Vega will load it and continues with the insertion of results and making all the ranking lists.

The `file_name.trfx` is used by Vega to pass sensible data to the external pairing engine. It is the same used, for example, to drive the JaVaFo engine, © Roberto Ricca, and its specification are detailed here http://www.rrweb.org/javafo/aum/JaVaFo2_AUM.htm#_Toc465604110
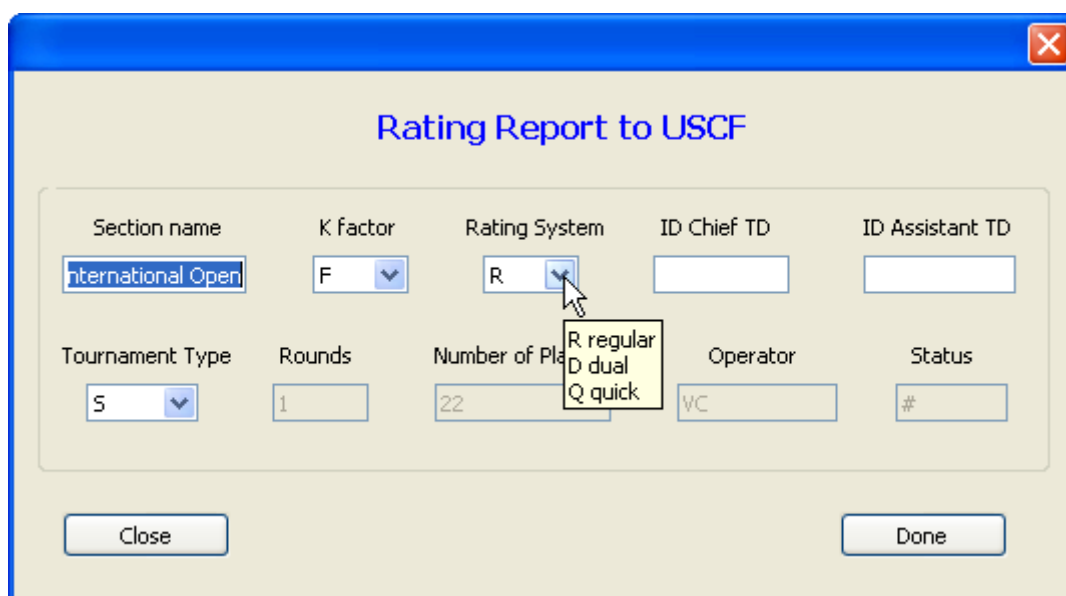
Appendix O: USCF Rating Report

In a large tournament there are usually several sections (for example Open, U2000, U1800, U1600). A Vega session can administer only one section of the tournament at a time. This is not a limitation because you can run multiple sessions of the program simultaneously or use the option **Extra/Set Festival**. The rating report for USCF needs 2 steps to be performed:

1. Generate an auxiliary file from each section. It contains information to be processed (file uscfsctn.txt);

2. Process all the uscfsctn.txt files and generate the three files needed by USCF for the final report: thexport.dbf, tsexport.dbf, tdexport.dbf.

These last files are not covered here (see the USCF Forum for details). Now we'll see how to generate them. The first task is performed when the section tournament is finished by selecting the option **Report / USCF/ Process current section**:
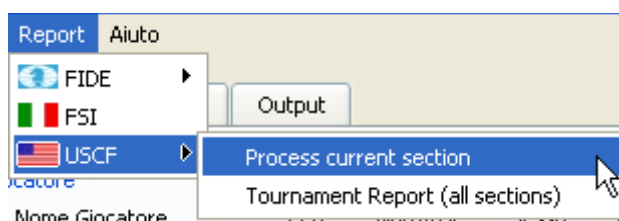

A new window will prompt the user for data relative to the **current section**. Some of this data is of course the defaults, so the user usually only needs to insert a few of them unknown to Vega (for example ID Chief TD, and so on. Please note that there are fields (Rounds, Number of Players, …) that cannot be edited.

By pressing the button **Done** Vega generates the auxiliary file uscfsctn.txt (it is tab delimited) in the working directory of the current section. This task must be done for each section.

Once all uscfsctn.txt files are ready, the user should select the menu item **Tournament Report:**
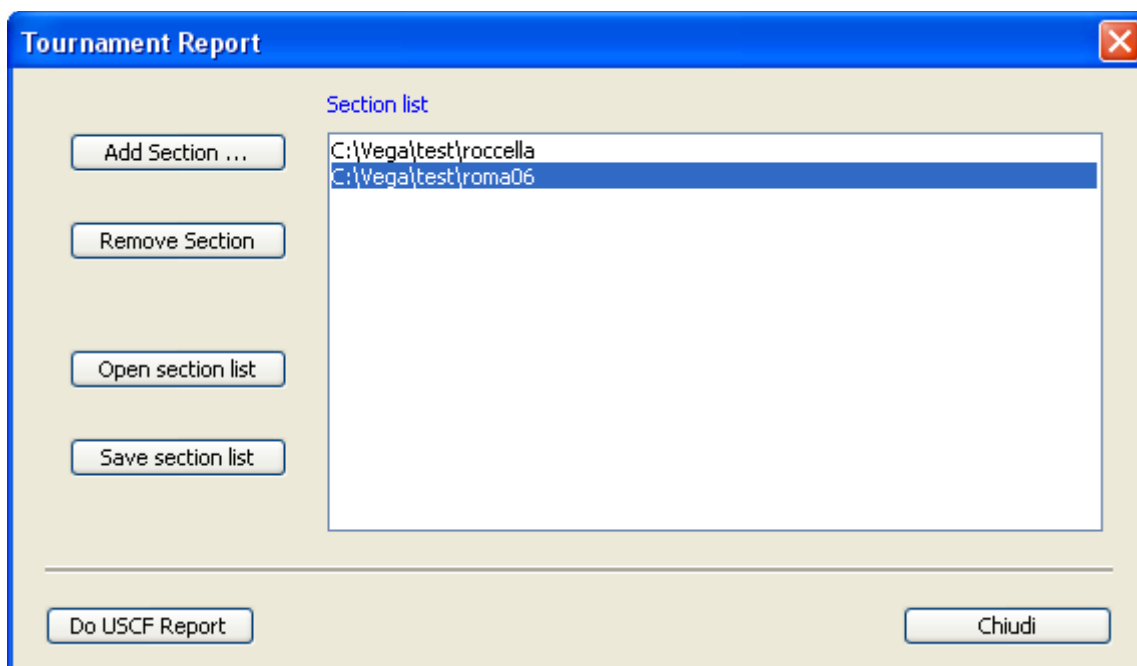
Add Section selects the working directory of each section. To remove one of them the user should press the button **Remove Section**. In our example the tournament has two sections and the working directories are those listed in the right side of the previous window. To save the list use **Save section list**. To load it use **Open section list**. When finished, press the button **Do USCF Report**. The following window will appear:

As seen before, some of the data is already known to Vega, some cannot be edited and some needs to be inserted by the user. When all the fields are filled (otherwise Vega will not continue) the user can generate the USCF report by pressing the button **Done**. The required files in dbf format are in the directory signaled by Vega (the one belonging to the first section of the list).