



Overview of the EBU National Grading System

This document states the objectives of the planned NGS and explains how it affects you, a playing member of the EBU.

Objectives for the National Grading Scheme

The NGS is a measure of performance for EBU members which is relevant to the vast majority of the membership, whether or not they are existing tournament players.

Hence the objectives for the NGS are:

- To provide a fair and trustworthy measure of an individual's current performance when playing duplicate bridge (Pairs only, at the moment), which is easy to understand and reflects changes (both up and down) in an individual's current standard of play.
- To enable new competitions to be constructed for use in Club, County and National competitions based on the current performance of individuals, through treating the measure of current performance as a "handicap".

It should be noted that the NGS is complementary to the Master Point Scheme, whose existing arrangement is unaltered. The two schemes are independent. The Master Point Scheme provides an indicator of an individual's aggregated lifetime achievement in bridge, and the Gold Point scheme provides a current ranking among the top players who frequently play in National events. In contrast, the NGS indicates an individual's current playing ability based on the last 40 or so playing sessions at whatever level they play.

NGS Grades

The NGS calculates a current grade and a grade band for each EBU member, which is updated whenever new results for that player are received.

The value of your current grade is the scheme's estimate of the percentage score that you would achieve on average if partnering another player with the same current grade at Match Pointed Pairs in a field of nationally average strength.

An average strength player will therefore have a grade of 50%, but there are no limits to the values of grades. The strongest players will have current grades of over 60% and the weakest under 40%. From early testing and experience elsewhere, the spread of grade values has a bell-shaped distribution. (For the statisticians, it's approximately Normal with a standard deviation of around 5 to 6%.)

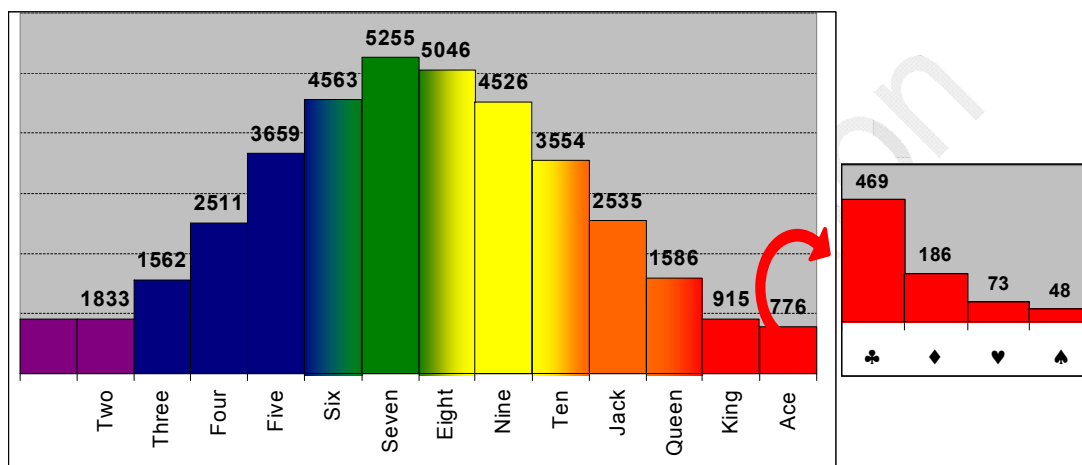
EBU grades have been divided into 13 playing card bands, ranging from 'Ace' at the top to 'Two' at the beginners' end. Each band covers a 2% range of grade values, with 'Eight' having a range of 49-51%. Based on a membership of about 50,000 we expect around 1000 'Aces' at any time.



The 'Ace' band will be further subdivided into four further bands:

	% grading range
Ace of Spades	67+
Ace of Hearts	65-67
Ace of Diamonds	63-65
Ace of Clubs	61-63

The chart below shows how the spread of grades looked with events loaded until the end of January, 2012.



Calculating your grade

Updating a current grade based on the scores you have achieved in duplicate sessions is not new. Similar methods have been tried and tested for more than 20 years in England, for example at the Young Chelsea and Sheffield Bridge Clubs and at the online club Bridge Club Live. However the details of the NGS scheme are unique to the EBU; the scheme has been tested on data collected since the start of "Pay to Play" in April 2010.

For most events, the calculation is based on your overall result for the session rather than each individual board, though for some events we need to use the results of your boards versus specific opponents. When you play in an event your expected score is based on the average of your and your partner's current grades and on the average strength of the players against whom you are competing. The amount by which you over (or under) achieve this score is used to determine your 'session grade' for that session.

For events that aren't scored using Match Points, we convert the scores to something equivalent in Match Points percentages.

We use your session grades for all the events that comprise your most recent 1000 boards and take a weighted average of these to produce your updated current grade. The weighting of older sessions declines linearly and contributes nothing to your current grade when you have played over 1000 boards more recently.

Until you have played 300 boards in graded sessions, your computed grade is still significantly affected by the initialisation process and is not published, though we still use the evolving grade in grade calculations. Only once you've played over 1000 boards is your grade said to be "mature".



Full details of the calculation rules will be published on the EBU website when the system is live.

Which events are graded

We are including all EBU pairs events.

Initially we plan to include:

- All club duplicate pairs events (both Match Point and IMP scored).
- All congress pairs events (All Play All, Swiss Pairs and Pairs league) organised at any level.

N.B. When we start up it is quite possible that some of these past events will not have been included. Future events will all be included.

Viewing your grade

At any time you'll be able to log in to the EBU website (in your member's area) and see your current grade, your partnership details, and all the contributing session grades (so you can check when that disastrous session with Fred will no longer contribute!).

We will also publish on the EBU website regularly updated grading lists of the top players, and enable you to check a player's current grade. You will also be able to view the results of a graded session, showing the overall strength of the event and the grades of each participant. Grading lists by clubs will also be available to club administrators.

Those who want to opt-out of the scheme can choose that their grade is not published. However, in order to maintain the integrity of the NGS, grade values will be calculated and updated for all graded sessions and all EBU members since their grades affect the grades of the players against whom they play.

There's one exception to this. If a player volunteers as a "host" or "mentoring" partner for a club duplicate session they can decide in advance that their and their partner's score for that session should be ignored by the NGS. This is limited to one pair per session and is at the discretion of the organiser of that session.

Accuracy of grades in the NGS

Your current grade is subject to random fluctuations depending on your luck, just as a single session is. We expect the standard deviation of the error in your current grade to be around 2%, provided you have a typical mix of partners. This depends in part on the exact parameters used within the NGS. Of course if you and your partner only ever partner each other, the difference in your strengths will not be known to the NGS and you'll have the same current grade. There are other, uncommon, partnership patterns which do not allow the difference between an individual's grade and those of their partners to be accurately estimated. We plan to analyse data on grade variability further as NGS data is collected.



The NGS is a **national** scheme, and the mixing between clubs and national or local tournaments will gradually allow differences between the average playing strength of different clubs to be reflected in their players' current grades.

Empirical evidence suggests that this will take around a year for the majority of clubs. This will be checked as we collect more data. There will be some clubs whose members rarely or never play in other graded sessions, where the members' grades are not truly comparable with the national pool of EBU members.

Partnership grades

For each partnership you play in, the NGS will also calculate a partnership grade, based on between 300 and 1000 boards played with that partner in the last 3 years. Some players may like to track this as well as their individual grade, as a "mature" partnership grade is less susceptible to the random errors described above. However, unless you play a lot of bridge with several partners, comparing your grades with different partners is as likely to reflect the effects of chance as to show how well you gel with each partner.