On Victory Point scales in duplicate bridge
By Ian McKinnon, Australia

Preamble

During 2103 the WBF introduced new VP scales for their events. I first noticed this when Ron Klinger went to press on this subject in the July ABF newsletter. He reported that the ideas behind the new WBF scales were two-fold: 1) Every Imp should count 2) The first Imps won should count more than the later Imps. He claimed that the WBF aims could be accomplished in a simple way. I saw these objectives as ideal.

Wanting to help the players I immediately produced a mobile phone app that would do the required calculations for the players so that the simplicity was not as big an issue. As the author of a scoring program that was never used by the WBF and rarely used outside Australia I did not look into the matter any further.

Recently the QBA state administrators elected to start using the new WBF scales which meant there was pressure for me to implement the new scales in my scoring program. At this point I realized that my scoring program that is limited to one decimal place in the VP scales needed many changes. The decision to use only one decimal place was made by me many years ago, based on the principle that if a two teams are separated by less than a tenth of one VP then a different method should be used to break the tie. Total IMPs is the obvious first step.

When I raised this concern with the WBF rules panel I was told that a tie break is never needed because the two decimal places always solves this problem. I was told the scales use what is called a 'continuous' scale so that all IMPs earned by a team do in fact count and a tie is always broken.

Unfortunately on further investigation I found this not to be true. The scales are not truly continuous and ties are not always broken in a fair way. In fact I observed that team 'A' who is losing to team 'B' by 0.01 VPs at the end of the round robin can feel quite aggrieved. Team 'A' might observe that if they won their matches in rounds 2 and 6 by 1 IMP less while at the same time team 'B' on rounds 4 and 8 had won those matches by one IMP less (both teams have a reduction of 2 in their total IMP score), then team 'A' would be leading team 'B' by 0.01 VPs.

Note I am not talking about extreme results here. Team 'A' winning by 13 instead of 14 in one case and 20 instead of 21 in the other. Then team 'B' winning by 12 instead of 13 and 19 instead of 20. This is not tie breaking; this is a lottery.

Here I am going to look at some of the main questions:

1. Is it possible to produce truly 'continuous' VP scales?
2. If you can, is it possible to only use single decimal places?
3. Do we need continuous scales, particularly when they are so complex?
4. Are continuous scales really fair?
5. Do continuous scales change the bidding strategies?

Introduction

Victory point scales have been debated ever since they were first thought of. The reason for using VP scales is to eliminate the possibility of massive IMP blow-outs that may occur in some matches. It is a way of making the results of each match comparable in any given event.

In determining the VP scale for any given number of boards we need to define the scale based on a number of restrictions or choices, mostly arbitrary and many political.

These restrictions include:

1. The choice of the blitz point
2. The maximum number of VPs earned for winning a match.
3. The minimum award for a losing team.
4. The ease of use by the players.
5. The value placed on the IMPs earned in each match.
6. The way VPs are expressed, including the number of decimal places.
7. The aesthetics of the scoring method.

The blitz point

The first thing that is needed in determining a VP scale is the cut-off point, the place where the IMPs earned are no longer relevant. Various statisticians over time have determined this point and have generally come up with the same answer, that is, the standard deviation on a symmetric distribution of scores is about 7 IMPs per board. Therefore the standard deviation for N boards is about $7\sqrt{N}$.

Henry Bethe has determined that value to be $7.51\sqrt{N}$ for the WBF and argues the blitz point is 2 standard deviations from the mean, or $15\sqrt{N}$. The WBF have adopted that decision.

For example in a 16 board match a win of 60 IMPs is the blitz point; the point where the winning team will receive the maximum VP score.

The maximum VPs in a match

Generally the administrators of bridge seem to think the same maximum number is needed irrespective of the number of boards played in each match, though there have been exceptions to this rule in the past.

There is a case for using the same scale where two events follow one from the other and the scores are combined and each match needs to be of the same value. This would be rare and can be catered for with proportional weighting of the matches.

Currently the WBF have decided arbitrarily to award a maximum of 20 VPs to the winning team. The previous incarnation of the WBF scales had a maximum of 25 VPs for all numbers of boards.

The minimum award

In the past there have been VP scales that have 'punished' the losing team for losing by more than the blitz point. Those scales subtracted points from their overall score for bad losses, without awarding the winning team any more than the maximum available.

That idea has lost favor and now the minimum is always zero. This is logical. Negative VPs never achieved any particular goal and is contrary to the ideals behind the blitz point definition. The previous WBF scale did not increase VPs for the winner after its 1st blitz point and continued to decrease the awards to the losing team until the scale reached zero at the 2nd blitz point.

Ease of use

Bridge players like to be able to determine their VP score after they have finished a match and scored it manually. This is understandable but with computers and mobile phone apps, or simply a list of possible scores, the players can determine their score.

This is clearly a case for the potential of a political decision to overrule the quality of the scoring method. I suggest that the quality of scoring method is paramount today, just like the choice of the best quality movements in pairs' events.

Ease of use should not be able to dictate the VP scale though it certainly can influence the decisions.

The value of IMPs earned

In the past there have been VP scales that were based solely on the IMPs earned in the match. This means a one-to-one relationship between IMPs and VPs up to the blitz point. This is not logical and out of touch with the realities of the meaning of VP scales.

As Peter Buchen says: 'it is clear that the first IMPs earned in a match are more important than later IMPs earned. For example, the one IMP earned in a match with only a 1-IMP victory margin is worth considerably more than the one extra IMP in a match already ahead by say 20-IMPs.'

The latest work on the VP scales attempts to address this issue. The first IMP earned is worth more than the second, and in turn, worth more than the third and so forth.

Many of the older VP scales were structured so that the first (say) 3 IMPs earned were of the same value, then the next 3 IMPs were each of the same value but of a different value than first 3 and so forth.

Addressing this issue is clearly an ideal objective of any VP scale. In particular the new WBF scale attempts to address this by using a continuous scale.

The appearance of the VP scale

A VP scale that is always expressed as integer values certainly has aesthetic appeal to bridge players. No decimal points involved means the scores look 'clean'. In doing this the apparent complexity of the scale is eliminated and to my mind is what a VP scale is all about.

The down side to simplicity is the lack of effectiveness of the scale. The values of the IMPs won by a team must be weighted by their position in the scale, hence the need for some complexity at least.

The new VP scale

The latest VP scale implemented by the WBF scoring panel is based on a few arbitrary limitations or rules:

- The VP scale will always have a maximum win of 20 VPs and a minimum of zero.
- The VP scale values will always be expressed to two decimal places
- The value of the IMPs in each match will be distributed proportionally (exponentially) across those 20VPs. Where possible the VPs earned for each IMP will be less than the previous one.

The first thing that is apparent in the published VP scales is the inability to produce pure continuity. Given this is the objective of the new scales it is hard to understand why the WBF have bothered.

Consider the 16 board scale again. The blitz point is 60 IMPs. Therefore the scale needs to be able to pinpoint 60 different results across the 20VP scale. The second limitation (using two decimal places) means that not every IMP increase is depicted as a smaller value than the previous. Perhaps if the awards for 16 boards were expressed to three decimal places it would be possible to achieve this goal.

This problem continues to persists as the number of boards in the matches increases. That is, as the number of boards increases we would need to increase the number of decimal places allowed to maintain that desired quality.

The following table (courtesy of Peter Buchen) illustrates the point. If we use one decimal place the delta value (increase amount) rarely changes. If we use two decimal places the delta value does change more often, but not enough to make the scale perfect. In the case shown here there are 25 different delta values using 2 decimal places and only 3 changes when using 1 decimal place.

	2 dec. pl.		1 dec. pl.			2 dec. pl.		1 dec. pl.	
Imps	VPs	ΔV	VPs	ΔV	Imps	VPs	ΔV	VPs	ΔV
1	10.31	0.31	10.30	0.30	31	16.88	0.15	17.20	0.20
2	10.61	0.30	10.60	0.30	32	17.03	0.15	17.40	0.20
3	10.91	0.30	10.90	0.30	33	17.17	0.14	17.50	0.10
4	11.20	0.29	11.20	0.30	34	17.31	0.14	17.60	0.10
5	11.48	0.28	11.50	0.30	35	17.45	0.14	17.70	0.10
6	11.76	0.28	11.80	0.30	36	17.59	0.14	17.80	0.10
7	12.03	0.27	12.10	0.30	37	17.72	0.13	17.90	0.10
8	12.29	0.26	12.40	0.30	38	17.85	0.13	18.00	0.10
9	12.55	0.26	12.70	0.30	39	17.97	0.12	18.10	0.10
10	12.80	0.25	13.00	0.30	40	18.09	0.12	18.20	0.10
11	13.04	0.24	13.20	0.20	41	18.21	0.12	18.30	0.10
12	13.28	0.24	13.40	0.20	42	18.33	0.12	18.40	0.10
13	13.52	0.24	13.60	0.20	43	18.44	0.11	18.50	0.10
14	13.75	0.23	13.80	0.20	44	18.55	0.11	18.60	0.10
15	13.97	0.22	14.00	0.20	45	18.66	0.11	18.70	0.10
16	14.18	0.21	14.20	0.20	46	18.77	0.11	18.80	0.10
17	14.39	0.21	14.40	0.20	47	18.87	0.10	18.90	0.10
18	14.60	0.21	14.60	0.20	48	18.97	0.10	19.00	0.10
19	14.80	0.20	14.80	0.20	49	19.07	0.10	19.10	0.10
20	15.00	0.20	15.00	0.20	50	19.16	0.09	19.20	0.10
21	15.19	0.19	15.20	0.20	51	19.25	0.09	19.30	0.10
22	15.38	0.19	15.40	0.20	52	19.34	0.09	19.40	0.10
23	15.56	0.18	15.60	0.20	53	19.43	0.09	19.50	0.10
24	15.74	0.18	15.80	0.20	54	19.52	0.09	19.60	0.10
25	15.92	0.18	16.00	0.20	55	19.61	0.09	19.70	0.10
26	16.09	0.17	16.20	0.20	56	19.69	0.08	19.80	0.10
27	16.26	0.17	16.40	0.20	57	19.77	0.08	19.90	0.10
28	16.42	0.16	16.60	0.20	58	19.85	0.08	20.00	0.10
29	16.58	0.16	16.80	0.20	59	19.93	0.08	20.00	0.00
30	16.73	0.15	17.00	0.20	60	20.00	0.07	20.00	0.00

The conclusion is that the 'continuous' scale is not really continuous, though it is clearly better than all previous attempts.

This raises a number of questions:

- Do we only consider the answer 'correct' when the scale is truly continuous?
- Do we accept the nearly correct answer?
- Do we impose limitations on the scale that address some of the other concerns such as simplicity and ease of use, at the cost of continuity?
- Do we dispense with the need for continuity?

The need for continuity

It is argued above that the first IMP is much more valuable than the next and so forth. That seems logical but let us investigate this with an imaginary scenario.

We have two teams playing in an event over 10 matches of 16 boards per match. The first team (A) wins the first match by two IMPs and lose the second by one IMP.

Using the scale shown above they get 10.61 in the first match and 9.69 in the second. That is a net score of 20.30.

The second team (B) win their first match by 59 IMPs and lose the second by 58 IMPs. They get 19.93 in the first match and 0.15 in the second. That is a net score of 20.08.

After two rounds team A is leading team B by 0.22 VPs. If these two teams continue throughout the event in this fashion, by the end of 10 rounds team A will be ahead of team B by 1.1 VPs. The questions:

- Is team A really better team than team B?
- Do we prefer team A to represent our club/state/country or team B?
- How critical are the differences in the value of the IMPs?

Team A is clearly a conservative team, while team B is capable of producing lots of swings and extreme results. Perhaps team A is the better choice and the scoring method supports that. The difference of 1.1 is not a lot, about 0.6% (1.1 out of a total possible score of 200).

This seems to support the claim in practice but not with very much conviction. I do question the need for complexity in this VP scale to achieve this particular outcome. Simpler scales would do the same thing. Were the WBF serious about the need for bias towards the small wins then this scale does not achieve much.

The choice of blitz point

There is no question of the validity of the standard deviation (SD) of the data samples used by the Henry Bethe, showing it to be $7.5\sqrt{N}$.

As an aside, in the 1970s, studies by myself showed the SD to be $7\sqrt{N}$. The difference I suspect was due the hand dealt cards versus the computer dealt cards today.

Where I have difficulty is in using 2 SD for the cut-off point. I suggest 1 SD is the lowest cut-off point and the scores outside that range should be treated with a lot less significance. The previous WBF scale acknowledged this point with the winner's award hitting the maximum (25) just after the 1 SD point and the losing teams losses continue to just after the 2 SD point where they receive zero.

The difference between 1 and 2 SD is the total number of scores that are considered in the calculations. Statistically we are looking at the 68-95-99.7 rule. With 2 SD we are considering 95% of the results, and with 3 SD we would use almost all scores (99.7%). Statistically 2 SD is considered the point where the margin of error is reduced to its minimum and outside that is casual variation.

What we want here is the cut-off point in a VP scale where the objective is to eliminate the possibility of massive IMP blow-outs. I claim the cut-off point should be 1 SD. Outside this the scores should be considered not significant *to the results of a bridge game*; they are outside the normal bridge experience. Just take a look at the results of any pairs game: to score above 68% is extremely rare. I will return to this discussion later in 'using a 2 SD blitz point' below. Here we will consider the effects of the lower 1 SD blitz point.

If the blitz point was chosen at 1 SD then the blitz point for 16 boards would be 30 IMPs. Changing nothing else in the current WBF VP scales and using the 30 IMP blitz for 16 boards, we get 26 different delta values out of a total of 30, shown here. That is closer to the objectives of the continuous scale.

IMPs	VPs	Δ
1	10.61	0.61
2	11.20	0.59
3	11.76	0.56
4	12.29	0.53
5	12.80	0.51
6	13.28	0.48
7	13.74	0.46
8	14.18	0.44
9	14.60	0.42
10	15.00	0.40
11	15.38	0.38
12	15.74	0.36
13	16.09	0.35
14	16.42	0.33
15	16.73	0.31
16	17.03	0.30
17	17.31	0.28
18	17.59	0.28
19	17.84	0.25
20	18.09	0.25
21	18.33	0.24
22	18.55	0.22
23	18.76	0.21
24	18.97	0.21
25	19.16	0.19
26	19.34	0.18
27	19.52	0.18
28	19.69	0.17
29	19.85	0.16
30	20.00	0.15

Consider the example in the previous section ‘the need for continuity’. The team B scores after two rounds will always be 20 with this scale. At the end of each pair of rounds team A has scored 20.59 with a gain of 0.59 over team B. By the end of the event the advantage for team A is 2.95 VPs or nearly 1.5%. This is a more convincing result of continuous scales.

The 20 VP scale

There does not seem to be any good reason for using a 20 VP maximum win in all cases of numbers of boards. The choice does depend on the objectives of the WBF scoring panel. If the main objective is to produce the best quality VP scale, with a perfectly continuous scale, then staying with the 20 VP scale is very limiting.

Adopting the 1 SD blitz point and using the same value for the maximum VPs (equal to the 1 SD value) we have a truly continuous scale. In the 16 board example, using a 30 IMP blitz and a maximum 30 VP scale we get a 15 VP tie and 30 different delta values, shown here:

IMPs	VPs	Δ
1	15.92	0.92
2	16.80	0.88
3	17.64	0.84
4	18.44	0.80
5	19.20	0.76
6	19.92	0.72
7	20.62	0.70
8	21.27	0.65
9	21.90	0.63
10	22.50	0.60
11	23.07	0.57
12	23.61	0.54
13	24.13	0.52
14	24.62	0.49
15	25.10	0.48
16	25.54	0.44
17	25.97	0.43
18	26.38	0.41
19	26.77	0.39
20	27.14	0.37
21	27.49	0.35
22	27.82	0.33
23	28.14	0.32
24	28.45	0.31
25	28.74	0.29
26	29.02	0.28
27	29.28	0.26
28	29.53	0.25
29	29.77	0.24
30	30.00	0.23

Again consider the example in the section ‘the need for continuity’. The team B scores after two rounds will always be 30. At the end of each pair of rounds team A has scored 30.88 and a gain of 0.88 over team B. By the end of the event the advantage for team A is 4.4 VPs or nearly 1.5% but marginally less than the previous case (1.475% v 1.467%).

Decimal places

In the example above we can see the scores are shown to 2 decimal places. I suggest that it is possible to use 1 decimal place with the above scale simply by rounding the VP results for all the scores. The underlying values are still kept to 2 decimal places to maintain the overall integrity of the method, but the presentation to the players is so much better.

IMPs	VPs	Δ
1	15.9	0.92
2	16.8	0.88
3	17.6	0.84
4	18.4	0.80
5	19.2	0.76
6	19.9	0.72
7	20.6	0.70
8	21.3	0.65
9	21.9	0.63
10	22.5	0.60
11	23.1	0.57
12	23.6	0.54
13	24.1	0.52
14	24.6	0.49
15	25.1	0.48
16	25.5	0.44
17	26.0	0.43
18	26.4	0.41
19	26.8	0.39
20	27.1	0.37
21	27.5	0.35
22	27.8	0.33
23	28.1	0.32
24	28.5	0.31
25	28.7	0.29
26	29.0	0.28
27	29.3	0.26
28	29.5	0.25
29	29.8	0.24
30	30.0	0.23

The single decimal place can be removed completely, just multiply each score by 10. That does mean a 300 VP win but I am sure the players can handle that. Clearly administrators could have the option of using such variations.

Again consider the example in the section ‘the need for continuity’. The team B scores after two rounds will always be 30. At the end of each pair of rounds team A has scored 30.9 and a gain of 0.9 over team B. By the end of the event the advantage for team A is 4.5 VPs or exactly 1.5%.

Using a 2 SD blitz point

I have shown that using a 1 SD blitz and a 1 SD VP scale does deliver a truly continuous scale. Unfortunately this is not possible using 2 SD for both values. We simply run out of slots, but true continuity does persist to the 1 SD level:

1	30.93	0.93	31	50.64	0.45
2	31.84	0.91	32	51.09	0.45
3	32.73	0.89	33	51.52	0.43
4	33.60	0.87	34	51.94	0.42
5	34.45	0.85	35	52.35	0.41
6	35.28	0.83	36	52.76	0.41
7	36.09	0.81	37	53.15	0.39
8	36.88	0.79	38	53.53	0.38
9	37.65	0.77	39	53.91	0.38
10	38.40	0.75	40	54.27	0.36
11	39.13	0.73	41	54.63	0.36
12	39.85	0.72	42	54.98	0.35
13	40.55	0.70	43	55.32	0.34
14	41.23	0.68	44	55.65	0.33
15	41.90	0.67	45	55.97	0.32
16	42.55	0.65	46	56.29	0.32
17	43.18	0.63	47	56.60	0.31
18	43.80	0.62	48	56.90	0.30
19	44.41	0.61	49	57.19	0.29
20	45.00	0.59	50	57.48	0.29
21	45.58	0.58	51	57.76	0.28
22	46.14	0.56	52	58.03	0.27
23	46.69	0.55	53	58.30	0.27
24	47.23	0.54	54	58.56	0.26
25	47.75	0.52	55	58.81	0.25
26	48.26	0.51	56	59.06	0.25
27	48.76	0.50	57	59.31	0.25
28	49.25	0.49	58	59.54	0.23
29	49.73	0.48	59	59.77	0.23
30	50.19	0.46	60	60.00	0.23

It can be seen that the above scale delivers a delta of 0.23 for 60 IMPs, the same value given to 30 IMPs in the 1 SD cut-off. The corollary is the 1 SD scale is giving zero for all scores past the 1 SD cut-off which is, I suggest, far closer to the real value of the larger IMP results. This is consistent with the objective of assigning more importance to the earlier IMPs. The decline in the delta value in the 1 SD case is much greater (steeper gradient) than those in the 2 SD example using the same exponential sensitivity model chosen by the WBF. I would suggest that the 1 SD gradient is closer to the most desirable.

Again consider the example in the section ‘the need for continuity’. The team B scores after two rounds is 60.23. At the end of each pair of rounds team A has scored

60.91 and a gain of 0.68 over team B. By the end of the event the advantage for team A is 3.40 VPs or 0.6%, the same poorer result as the 20VP scale.

Pairs' events

I have not seen anything published about using the new VP scales in pairs events. It is important that organizers understand the standard deviation is different for pairs' event where the scores are being compared with a datum score, and is in fact:

$$\frac{7.51\sqrt{N}}{\sqrt{2}} = 5.32\sqrt{N}$$

Simpler approaches

The studies into the mathematics by the WBF scoring panel are extensive and have produced a very commendable result. It has meant I was able to use their algorithms to produce the variations shown above without too much effort.

One of the consequences of the new scales has been a feeling of uneasiness by the bridge players who would like to better determine their VP scores after each match. What they may not understand are the objectives of the panel, to produce a continuous scale.

One solution is to use a linear continuous scale. At least it is possible to do that and achieve continuity, but such a scale does not bias the results towards the early IMPs in the same way as the exponential scale. From the player's point of view the linear scale continues to display the same complexity and requires two decimal places. Consequently the linear scale is unlikely to satisfy anybody.

VP scale granularity

One of the consequences of having all the IMPs counting in the VP scales is the granularity is a lot finer. There are as many values in the scale as the blitz-point value. In the 16 board example there are 60 entries and the 8 board match there are 43. In essence the VP scale is moving closer to an IMP scale. Consider a very early European championships VP scale:

IMPs	Winner VPs	Loser VPs
0-3	3	3
4-10	4	2
11-20	5	1
21+	6	0

This was what a VP scale was all about. Coarse granularity and less VPs involved. Over the intervening years the granularity has been steadily getting finer with the latest being extremely fine.

The first reaction of the players using the new scales was the apparent importance of overtricks in the close matches. This is the case but maybe this was always the case. The one thing that has not been considered is the effect of the finer granularity. Henry Bethe in his studies showed that the median score occurs at $5\sqrt{N}$ IMPs. This is essentially the score you might expect to get in a match. In the 16 board match, and using the latest WBF scale, that point occurs with a win of 20 IMPs which translates into 15 VPs.

Ignoring simple alternate outcomes like going two down or doubled contracts, it is generally accepted that you should bid a game when the odds are (using total point scoring) 41% when not vulnerable and 33% when vulnerable. You should bid the 'tight' vulnerable games more often than the non-vulnerable.

170/420=40.5% (NV) and 220/670=32.8% (V)

Converting these scores to IMP values we see that failing in a non-vulnerable game loses 5 IMPs. Making a non-vulnerable game gains 6 IMPs. Failing in a vulnerable game loses 6 IMPs and making gets 10 IMPs.

5/(5+6) = 45.5% (NV) and 6/(6+10) = 37.5% (V)

If we now do some calculations, assuming our final result is most likely to be the median score, then the odds of bidding a game changes. Again consider a 16 board match where the median result is 15 VPs.

When non-vulnerable and we fail to make a game we lose 1.03 VPs. If we make the game we gain 1.09 VPs. When vulnerable and fail we lose 1.25 VPs and making gains 1.73. The odds become:

1.03/2.12 = 48.5% (NV) and 1.25/2.98 = 41.9% (V)

In other words there is less difference between the vulnerabilities and the bidder should be slightly more confident of making a vulnerable game before bidding it. These values are moving closer to the matchpoint advice of 50%.

Using the 2 SD scale with 2 SD blitz point (the scale with the most promise in terms of continuity) gives us:

3.10/6.36 = 48.7% (NV) and 3.77/8.96 = 42.1% (V)

This result is much the same.

Using the 1 SD blitz point and VP scale the results are worse, suggesting that a blitz point lower than 2 SD cannot be used despite the success in the continuity of the scales.

If we now consider the case of fewer boards in the matches the effect is more dramatic. For example the new WBF 20 VP scale for an 8 board match has a blitz point of 43 IMPs, and an expected median score of 15 IMPs, we find the odds are:

1.45/2.90 = 50% (NV) and 1.78/4.05 = 43.9% (V)

I accept this is not an in depth study of this subject, but it does indicate that the new scales should be looked at more carefully for both game and slam bidding. The affects of finer granularity in the new VP scales should not be quickly dismissed.

Conclusion

Unfortunately the WBF have not achieved the goal of continuous scales, though I have shown above that it is possible to do so by changing the limitations placed on the scales. Even making those changes does not address the ease of use and simplicity concerns expressed by the bridge playing public, but perhaps it requires a little harder sell.

Unless changes are made to produce a truly continuous scale there does not appear to be any advantages in such scales, and in fact there are many disadvantages.

The amount of bias towards small wins is very sensitive mathematically. At some point that bias can affect the strategies used by the players. It is not surprising that when the scoring method changes the strategies of the players invariably change. Playing for overtricks and the odds of bidding games are just two examples..

I would like to suggest that other choices in the sensitivity model, a cut-off point between 1 and 2 SD and a different choice of maximum VP scales may solve some or all of the problems in achieving the current WBF objectives.

My observation is that changes to the sensitivity model could solve the problems. Further research could show that other models may deliver the results the WBF are seeking.

It is clear the new continuous VP scales need to be reconsidered. Clear policy decisions are needed from the WBF.

- Should the WBF be using continuous VP scales?
- If so should every IMP up to the blitz point count?
- How much gradient (bias) should there be in the sensitivity?
- What is the best choice of maximum VPs for the scales?
- Can the blitz point be less than 2 SD?
- Is it acceptable for the VP scale to alter the strategies in the teams' game?

If the bias in the current scales are meeting their needs then the complex, partially continuous scales, are not needed and are unfair. A simpler approach such as those suggested by Ron Klinger in the July 2013 ABF newsletter, are clearly sufficient.

Ian McKinnon, December 2013.