Hi Bertram, thanks for getting to me. Having worked on quite a few cases in the anti-cheating committee of WBIF (World Backgammon Internet Federation) I was happy to look into this case and these are my findings.

There are couple of important factors to consider:

- the person's general level of play (both online and live)
- level of play in suspicious matches
- detailed breakdown of the errors in those matches
- difficulty of the decision and how meaningful the sample is

I'll start with the last one. Having gone through all of the matches that you sent me in detail I can say that they were moderately difficult. If 5/10 is the average difficulty, I'd say this particular sample would be something like 6-7/10 so definitely good, challenging sample with quite a few tricky decisions.

I would expect people to perform more or less what they normally play (or even bit worse) if given these same kind of decisions.

As for the Anna Sofia's general level of play, I looked into her online profile on Heroes as well as her live matches posted on the DBgF site.

kokolove	×
Rating	1445.57
Peak rating	1567.36
PR last 100	12.62 / 7.382
Win ratio	45.9%
Experience	379
Tournament points	0
Tournament wins	0
Average luck	0.046
Luckiest match	5.625
Unluckiest match	-4.112
Awesome in a row	28
◆ Show	<b>②</b> About

PR last 100 shows 12,62 PR for studio format matches (practice or friendly matches) and 7,38 PR for competition format matches (or tournament matches).

This in itself is already fairly unusual as these values tend to be more or less similar. It seems like Anna Sofia is performing far better in official tournament matches than non official matches.

Note also that the competition format PR was also affected by the matches you sent where she had played extraordinarily low PRs.

I also made an XG profile of her 7 recent live matches (from June to October this year) posted on DBgF site:





It turns our that her live level in this sample is 8,51 PR with pretty bad cube PR of 13,82 which will be relevant in further discussion.

So both online and live sample suggest that she is not better than 8.x PR.

Now let's look at the level of the matches that you provided (all 13 pointers with good number of decisions):

1,55

2,04

5,10

3,08

2,61

Even just a brief glance at these PRs suggests that this is an extremely strong level of play. Having also gone through all of the matches I was impressed multiple times by many of her correct moves and cube decisions. Had I now known who the player was I would assume it had to be a grandmaster, probably a very strong one as well.

This is not the kind of level that I would normally expect even from a 5x player, let alone an 8x player.

For an 8x player to perform even just ONCE at the level of 1-2-3 PR in a long match is highly unlikely. For it to happen 4 or 5 times in a row defies all odds.

In fact had she not timed out and been affected by serious time trouble in the third match, that match would have also been in 2x-3x range. It's also interesting to note that in that match, up until 11-0 she played nearly flawlessly and then the very next 2 games were a disaster (7x and 9x) with many bad errors totally unlike the player at the beginning of the match.

Probably there was no need to check any decisions once she had the 11-0 lead, but it eventually backfired.

## Here is the XG profile of all 5 online matches:



If we exclude the time trouble match, her average PR is 2,41 which is very difficult to achieve even for very strong grandmasters.

Her detailed profile reveals another anomaly and that is the cube PR which is 2,36.

Cube PRs are generally very high and much higher compared to Checker PRs. In fact, most grandmasters cube PRs fall in 4x-6x PR range which may be surprising to you. It's just that there are lot fewer cube decisions than checker decisions on average so it's your checker PR that contributes the most to your average PR.

There are only 2 people in the world who can keep their cube PR as low as 2x, and even for them it's closer to 3 PR than 2 PR. Their names are Mochy and Dirk Schiemann.

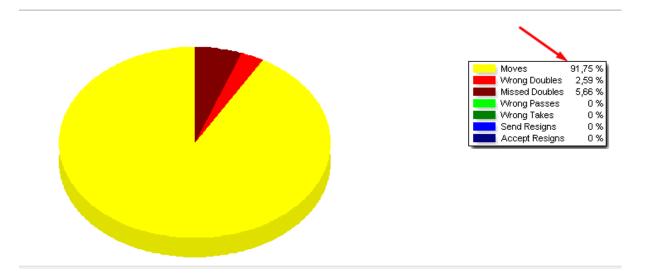
Not only is her general level of play far beyond what's expected for 8x PR player, the cube level that she showed in your tournament exceeds pretty much every grandmaster in the world.

Another thing to note is that cube PR is typically always higher than checker PR (this is universally true for any player), but for her it's not the case. This strongly suggests that many of her cube decisions have been checked by the bot. Zero take/pass mistakes and quite a few impressive doubles.

Compare this also to her live profile provided previously where her cube PR was over 13 PR.

In WBIF we had a case of a grandmaster level player who was suspended for consistently performing at 2x cube level. His live cube level was 5x. This goes to show that playing this low with the cube is pretty much impossible even for an average grandmaster.

If we look at the detailed distribution of her errors we see another very unusual thing, moves contribute to 91,75% of her errors, while cube only 8,25%. Typically, for any human player moves will be in 70-78% range (rarely up to 80%) and the rest will be cube mistakes.



In conclusion, the level shown in your tournament far exceeds what an 8x PR player is capable of. Both checker play and cube play are significantly better than what she's shown in her live matches so far (as well as in her non-tournament online matches).

If this were a WBIF player, I would without any doubt vote for the immediate suspension from all tournaments.