

The Future of Taekwondo – Discussion Paper by Grandmaster Joon No

The Future of Taekwondo

The IOC's message for Taekwondo following the Olympic Games in Athens was crystal clear: the World Taekwondo Federation (WTF) must successfully introduce an objective and transparent judging system that meets today's standards or Taekwondo's status as an Olympic sport is in danger. The importance of introducing an electronic scoring system into the sports of Taekwondo does not need further re-emphasis.

The purpose of this paper is to discuss if Adidas Electronic Body Protector (EBP) or LaJUST Electronic Impact and Detection Scoring System (EIDSS) should be adopted as the official judging system to meet that challenge. Both systems were used at the 4th Commonwealth Championship in Canada (LaJUST EIDSS) and 3rd Oceania Championships in New Zealand (Adidas EBD), allowing comparisons to be made. I had the privilege of witnessing both systems in action at both Championships.

To be objective, both systems will be compared in relation to WTF **Kyorgi rules** instead of specifications of each system. The impact each system will have on the future of Taekwondo if adopted as the universal official judging system is also discussed.

To start the comparison, relevant articles in the WTF **Kyorgi rules** (effective 2006) are quoted:

Article 11. Permitted Techniques and Areas

1. Permitted Techniques

- 1) Fist techniques: Delivering techniques by using the front parts of the forefinger and middle finger of the tightly clenched fist.
- 2) Foot techniques: Delivering techniques by using the parts of the foot below the ankle bone.

2. Permitted Areas

- 1) Trunk: Attack by fist and foot techniques on the areas covered by the trunk protector are permitted. However, such attacks shall not be made on the part of the back not covered by the trunk protector.
- 2) Face: This area is the face excluding the back of the head, and attack by foot techniques only is permitted.

Article 12. Valid Points

1. Legal Scoring Areas

- 1) Mid-Section of the trunk: The part covered by the trunk protector
- 2) Face: The whole part of the face including both ears

2. Points shall be awarded when permitted techniques are delivered accurately and powerfully to the legal scoring areas of the body.

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Under the WTF Kyorgi rules, to score a valid point, Article 12 clearly states that it must be **permitted techniques** delivered **accurately** and **powerfully** to the **legal scoring areas of the body**

Article 11 is very clear about what constitute a permitted technique. **First two knuckles** of the clenched fist or **part of the foot below the ankle bone**.

How does Adidas EBP compare in relation to WTF Kyorgi rules?

According to Adidas Tech guide 2007 (copy enclosed)

EBP score is based purely on the strength of impact. This is based on the assumption that a strike from a permitted technique will always deliver a harder impact than a strike from a non-permitted technique. EBP's notion of distinguishing between a permitted technique and non-permitted technique is by the difference in strength of impact.

Any Taekwondo practitioner knows there is a serious flaw in this assumption. Strikes from knee, elbow and body slam (all illegal technique) can easily trigger a score. At the same time, strikes from a permitted technique will fail to trigger a score if the impact level setting is too high.

In fact, EBP recognises that a non-permitted strike can trigger a score on their system in their technical guide but referees are expected to pick these up and disallow the point. EBP still requires manual human intervention which is the subject of IOC's concern.

While EBP will satisfy the "powerful" and "legal scoring area" requirement in Article 12, it clearly cannot satisfy the "permitted techniques" requirement under Article 12 for a valid point. EBP clearly does not have the ability to differentiate a permitted technique (strike by first two knuckles and part of foot under ankle bone) as defined under Article 11 from a non-permitted technique.

As such, Adidas EBP system does not satisfy the requirement under Article 11 and 12 of the WTF Kyorgi rules on valid points.

Impact of adopting EBP as the official judging system

In view of EBP's inability to meet the basic requirement of recognising a valid point under the WTF Kyorgi rules, it will be a mockery to the WTF rules to allow such system to be used as the official system in WTF sanctioned events. This does not help WTF in trying to achieve the objective and transparent judging system for Taekwondo.

During the 3rd Oceania Championships, in order to reduce the instance of non permitted technique scoring, the levels of impact for scoring were set to unrealistically high levels. By setting the impact level at dangerously high levels, it increases the risk of serious injuries for the competitors.

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Because of the increased impact level, there is also an increase in the number of matches ending with no score. This greatly diminishes the excitement and entertainment value of the game.

By emphasising on strength alone, there may also be an adverse effect on the development of Taekwondo. Taekwondo may develop into a sport of pure brute force rather than technique, skill and grace, which is what Taekwondo is about.

Lastly, requiring the referee to remove score from incorrect technique from time to time will disrupt the tempo of the game. This will affect both performance of the competitors and the enjoyment of the spectator. In addition, by retaining human manual intervention on the judging system, it will be extremely difficult to convince IOC that EBP is the objective and transparent judging system they are looking for.

How does LaJUST EIDSS compare in relation to WTF Kyorgi rules?

Lajust EDISS uses a different approach. It requires both the correct level of impact and the correct point of contact to register a score.

In addition to a preset impact level, EDISS clearly identifies the permitted techniques areas. Sensors are attached over the permitted technique areas, the first two knuckles of the clenched fist and the parts of the foot under the ankle bone by the use of gloves and socks.

Only when a strike using the permitted techniques where sensors covered areas hit the trunk protector, will a score register.

Comparing this to the WTF Kyorgi rules, EDISS satisfies the “permitted techniques”, “accurately”, “powerfully” and “legal scoring area” requirement under the WTF Kyorgi rules Articles 11 & 12. Based on these facts, EDISS has satisfied the WTF Kyorgi rules on valid points.

Impact of adopting EDISS as the official judging system

EDISS conforms to the WTF rules. As such, it will not impair the development of Taekwondo in the long run. In fact, the use of EDISS will preserve Taekwondo as it is, an art that emphasises on technique, skill and grace.

The use of EDISS will increase the excitement of the game and performance of the competitors as the system runs seamlessly and recognises all proper executed techniques up to last second of the competition without the need for human judgement or interventions. This was evident at the 4th Commonwealth Championships.

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Since power level can be set at realistic level, the risk of injuries to competitors is reduced.

It also allows the referees to focus on officiating the match instead of monitoring the score board to ensure no incorrect points awarded.

Using EDISS, the skilful competitor will emerge the true winner and not those with the hardest incorrect kicks.

Other observations

Currently EBP uses Bluetooth wireless technology to transmit score from their trunk protector to their scoring station. Bluetooth wireless is very susceptible to interference due to wide range of equipment using Bluetooth wireless technology, examples: hand phone, laptops and trunk protector from other courts etc.

On the other hand, EDISS has developed a proprietary wireless technology that is less susceptible to radio wave interferences.

Conclusion

This is not about Adidas EBP or LaJUST EDISS being the better system technologically. It is about which system is best suited for the development of Taekwondo and meets the WTF Kyorgi rules, as well as the future of Taekwondo, ensuring that Taekwondo remains as an Olympic sport.

LaJUST EDISS may not be perfect today, but it represents the best option available today to meet the challenge laid down by the IOC.

As the governing body for Taekwondo globally, WTF should act decisively now to secure the future of Taekwondo. WTF should remove all ambiguity around the choice of electronic judging system and work with the best option to further improve the system currently so that it will be ready for the next Olympic. Otherwise, the next Olympic may be the last for Taekwondo.

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