

## IP video for sports rebroadcasts and aid in arbitration.

The Spanish Wrestling Federation uses Axis cameras for bolstering the impact of wrestling championships.



### Organization:

The Spanish Federation of Olympic Wrestling and Associated Styles

### Location:

Madrid, Spain

### Industry segment:

Stadiums/Venues

### Application:

Broadcasting, arbitration support

### Axis partner:

Noa Sports

### Mission

Despite being part of the Ancient Olympic Games, the sport of wrestling still doesn't receive the media attention it perhaps deserves. In order to improve in this respect, the Spanish Wrestling Federation decided to consider offering the rebroadcast of major national competitions over the Internet, with the goal of boosting the popularity of the wrestlers and enabling fight sport fans to view live and delayed broadcasts from practically anywhere.

### Solution

When the time came to choose a technology partner for providing online streaming of past events, they contacted Noa Sports, an industry specialist and Axis partner. After preliminary testing it was determined that three cameras were required to cover each of the different mats on which competitions are held, allowing them to add more viewing angles – as well as increased image resolution to a level beyond current international standards for video-based arbitral support systems.

### Result

Thanks to the addition of IP video cameras from Axis Communications, along with the Noa Sports system, fans of fight sports are now able to experience fighting competitions organized by the Spanish Federation from anywhere with an Internet connection. In addition to the use of the cameras for image capture, they also serve as aids in determining fairer and more accurate dispute resolution – with decisions now being based on images of higher resolution and from more viewing angles.

**“To be able to see precisely whether a fighter has stepped out of bounds, used an illegal technique or if match time has run out, is essential for arbitrators to obtain the precise evidence necessary to avoid or limit the number of possible claims by coaches. We believe that the Noa Sports arbitration assistance system is currently more full-featured and easier to use than that of the International Federation of Wrestling Associations.”**

**Francisco Javier Iglesias Serna, Technical Director, Spanish Federation of Wrestling and Associated Disciplines.**

Wrestling is one of the oldest of activities, and it has persisted to evolve into a major sports spectacle. Greco-Roman wrestling has been one of the major sports in the Olympic Games since the first modern-era competition held in Athens, in 1896. Subsequently, for the 1904 Olympics, Men's Freestyle Wrestling was added, although there was a wait until 2004 for the appearance of Women's Wrestling at the Games.

Fight sports have evolved considerably in the last few decades and there are now eight different styles recognized by the International Federation of Associated Wrestling Styles (FILA), including the more classic forms based exclusively on takedowns as well as others that permit blows and tap-outs, and others that are a cross between personal defense and martial arts. As a result of the differences between them, each style has its own rules.

### **Video system supports arbitration**

This part of the sports world has also seen the arrival of new technologies, and as a result of the complexity of arbitration since the 1980s they have been using video systems to support decisions arrived at from arbitration. Currently, in the case of a disputed arbitral decision, a coach has the right to file a protest; if it is accepted, the arbitrators refer to the video and can change a decision if necessary. If no change is necessary, the fighter is warned and the coach loses the option to protest for the rest of the match. The video support system for dispute resolution is composed of just one single PTZ camera and video management software. However, it is highly sophisticated and to achieve optimal results requires specific training combined with many hours of use.

### **Stream championships over Internet**

In Spain, federated fight sport athletes number more than 7,000, with associations to more than 80 clubs throughout national territory. Faced with the task of bolstering the impact of the various championships organized by the Spanish Wrestling Federation, they decided to start streaming them over the Internet, and to accomplish this they contacted Axis partner Noa Sports, a technology company with specialized equipment and vast experience in sports rebroadcasting. The rebroadcast system proposed included Noa Sports hardware and coverage by three high-definition (HDTV) IP cameras of all of the mats on which matches take place, and in the case of the National Championships, this can be as many as eight.

### **Quality images and improved viewing angles**

The standard models are the AXIS P3364-V Network Camera that provides excellent quality interior images, given its incorporation of WDR and Lightfinder technologies, as well as the AXIS P5534 PTZ Network Cameras that provide overall views as well as a high level of detail – thanks to their powerful 18x optical zoom lens.

While preliminary tests determined that coverage of all competition mats was achieved using three cameras of HDTV resolution, the images used for the rebroadcast of fights would also serve as a great help in support of arbitration, because at times the only viewing angle offered by the other system was not accurate enough to dispel all possible doubts. The support system for arbitral decisions by Noa has been well-received as much for the quality of its images as for its reliability and ease of use.

