AFC ASIAN CUP AUSTRALIA 2015
REFEREE TECHNICAL REPORT
REFEREE TECHNICAL REPORT
CONTENTS

1. MESSAGE FROM AFC PRESIDENT 7
2. INTRODUCTION 8
3. OVERVIEW OF GENERAL ORGANISATION 10
   HEADQUARTERS 10
   FACILITIES 11
   REFEREEING EQUIPMENT 11
   SUPPORTING EQUIPMENT FOR MATCHES 12
   TRANSPORT/ACCOMMODATION SERVICES 12
4. DELEGATION SUMMARY 14
   AFC REFEREEING DELEGATION 14
   LOC SUPPORT DELEGATION 18
5. PRE-COMPETITION 19
   ADMINISTRATION 19
   TECHNICAL 20
6. PRESIDENT’S VISIT 23
7. DURING COMPETITION 24
   MATCH ASSIGNMENTS 24
   LIVE VIDEO ASSESSMENT 24
   VENUE ASSESSMENT 24
   PREPARATION OF MATCH DEBRIEFING MATERIALS 25
   MATCH DEBRIEFING SESSIONS 25
   INDIVIDUAL TRIO MATCH DEBRIEFING 25
   DAILY PROGRAMME (PRACTICAL) 25
   DAILY COORDINATION MEETING 25
8. TECHNICAL SUMMARY 26
   GENERAL PERFORMANCE 26
   GENERAL MANAGEMENT 26
   UNDERSTANDING SEVERITY OF FOULS 26
   MOVEMENT & POSITIONING 27
   PHYSICAL CONDITIONING 27
   MODERN REFEREEING TRENDS 27
9. PHYSICAL SUMMARY 34
   OBJECTIVES OF THE PHYSICAL AREA 34
   TOURNAMENT DATA 34
   PRESENTATIONS 35
   FITNESS CONDITIONING / MONITORING 37
   USING HEART RATE MONITOR (HRM) SYSTEM 39
   DURING COMPETITION 40
   PERFORMANCE SUMMARY (PHYSICAL POINT OF VIEW) 40
10. CONCLUSION 41
11. ACKNOWLEDGEMENT 42
12. ANNEX 44
Dear friends,

I would like to place on record my appreciation for the exemplary job done by our referees during the AFC Asian Cup Australia 2015. I am proud of their performances and I take this opportunity to congratulate each one of them.

The AFC has been fully committed to providing a solid foundation for the development of Asian referees because we firmly believe that refereeing is one of the important pillars of our continent’s ‘football ecosystem’. The excellent officiating we saw in Australia only served to reinforce the fact that this commitment remains well and truly on track.

I have no doubt that our referees will continue to contribute positively and, together with the support of the AFC Referee Instructors and Assessors - who have shown tremendous dedication and commitment to ensure that our officials are at the top of their game - they will continue performing at the very highest level.

Furthermore, the AFC Referees Committee and Refereeing Department are also working steadfastly towards implementing key plans and strategies together with our Member Associations, who have their own initiatives aimed at further improving the standard of refereeing.

There can be little doubt that our referees raised the bar to a new high in Australia.

It is not easy to maintain the same level, but I’m confident that with the support of all our stakeholders, including Member Associations, we will be able to stage another memorable Asian Cup in 2019 in the United Arab Emirates.

Let’s all work together to make Asian football more vibrant.

Yours sincerely

Salman bin Ebrahim Al Khalifa
AFC President
The AFC Asian Cup Australia 2015 was a huge success in terms of organisation, attendance and television viewership, with the Confederation’s flagship tournament attracting massive interest in Australia, Asia, and across the globe with its high quality matches.

Preparation for the events and activities that would chart the road map for refereeing success at the 16th edition of the competition began immediately after 2011 AFC Asian Cup in Qatar. These comprehensive programmes aimed at achieving the goal of ensuring the highest level of refereeing performances at the AFC Asian Cup started with the pre-selection and monitoring of match officials and also focused on the enhancement of teaching materials and methodology.

Prior to their arrival in Sydney, the appointed referees and assistant referees took part in weekly activities on the E-Learning portal, AFC On The Field, which also enabled constant communication between the main refereeing instructors and the AFC Asian Cup match officials.

Under the guidance and supervision of top AFC/FIFA instructors, this technology enhanced the match officials’ understanding and application of the Laws of the Game enabling a uniform and consistent interpretation and application.

We focused not only on the technical and physical aspects of refereeing, but also on the management of play, teams and psychological aspects when officiating in a match, a trend that is now embraced by many.

This report provides an overview of the planning and activities organised before and during the AFC Asian Cup Australia 2015 and their contribution to a successful tournament.

In addition to this Technical Report serving as guide for future AFC Asian Cups as well as other centralised AFC competitions, it is our hope that referee trainers in Asia will use this information as a reference to enhance development in their respective countries.
OVERVIEW OF GENERAL ORGANISATION

The highest quality of organisation and planning is essential for a successful running of a competition of the calibre of the AFC Asian Cup.

Many factors had to be taken into account including early confirmation of accommodation, training fields, facilities, equipment needed for classroom and practical sessions, match preparation and the recovery of match officials.

The following overview presents the holistic organisational plans and action taken, leading to the successful organisation of the tournament.

HEADQUARTERS

The Referees’ Headquarters (HQ) was located in the Pullman Hotel in Sydney Olympic Park and was the nerve centre for all refereeing activities and operations. The facilities below were used throughout the duration of the competition.

SECRETARIAT

The Nexus 2 was used as the administration and operation centre for all referees’ activities. The referees department conducted their daily work and held meetings with the instructors and the LOC staff at the Secretariat.

ACCOMMODATION

The refereeing delegation, which included AFC staff, referees, assistant referees, and technical referee instructors/assessors stayed in the HQ throughout the competition. Referee instructors/assessors who had assignments at venues outside Sydney returned to the HQ after the completion of their assignments.

REFEREE SEMINAR ROOM

The Echelon was used for the preparatory course and also for the daily match debriefing room.

DINING ROOM

The Nexus 1 was used for all meals throughout the duration of the competition.

REFEREE’S LOUNGE

The Executive Lounge located on the 16th floor of the hotel, provided comfortable sofas, televisions, computer games, table soccer, and light refreshments creating a comfortable atmosphere for match officials to relax and to observe the matches.

STOREROOM

Two store rooms were allocated to the referee’s secretariat. One storeroom was located at the training stadium and another located in the HQ. The storeroom at the stadium housed equipment for daily training such as balls, bibs, cones, markers, electrical and manual ball pumps, and drinking water. The storeroom at the HQ housed the electronic substitution boards, communication systems, electronic beep flags and other equipment.

SOCIAL/RECREATIONAL ACTIVITIES

The LOC organised a day trip which involved a tour to Manly Beach and a ferry ride to the Sydney Harbour, one of Australia’s most iconic tourist attractions. It was an enjoyable and relaxing activity for the match officials.

FACILITIES

TRAINING FIELD

The Sydney Olympic Park Athletic Centre, located five minutes drive from the HQ was the designated field for the daily practical training sessions. The location of the Athletic Centre was very convenient and greatly assisted in the daily planning for the practical training.

SWIMMING POOL/GYMNASIUM

The Aquatic Centre in Sydney Olympic Park was the primary location for the match officials’ post-game recovery sessions and was located just a five minutes walk from the Referee’s HQ. The hotel gymnasium was used as alternative secondary facility for match officials’ recovery sessions.

REFEREEING EQUIPMENT

REFEREES UNIFORM

The match officials were issued with dedicated referee jerseys and shorts embroidered with the official AFC Asian Cup Australia 2015 logo.

TRAINING ATTIRE & FOOTWEAR

A new set of training attire with the AFC Asian Cup Australia 2015 logo was issued to the match officials, who were also provided with NIKE boots, turf shoes and running shoes. Match officials attending main daily practical training sessions wore a different coloured training jersey from those referees who were attending match preparation sessions. A training jersey of another colour was worn by officials during their pre-match warm up.

FORMAL ATTIRE

To enhance the image of match officials in the AFC Asian Cup Australia 2015, AFC provided them with material for making formal suits and shirts.
VANISHING SPRAY
Vanishing spray was used for the first time in AFC Asian Cup competition at Australia 2015. It was a useful tool for the referees to manage the 10 yard distance which effectively reduced encroachments by the players during free kicks.

COMMUNICATION SYSTEM
The system enhanced communication between the referee, assistant referees, and the fourth and fifth officials in the field of play. As the system belonging to the AFC was not in compliance with the Australian radio frequency regulations, the communication system was rented from an Australian company.

BEEP FLAGS
These electronic flags were used to further enhance communication between the referee and assistant referees in the field of play.

TRAINING BIBS
A total of 80 dedicated training bibs in four different colours were provided for this competition. The bibs were used during practical training sessions with different colours representing involvement in a specific activity.

TRANSPORT/ACCOMMODATION SERVICES
The LOC assigned a team of volunteers to serve in the Transport & Accommodation Service Team (TAS), which dealt with the following:

INTERNATIONAL ARRIVAL/DEPARTURE
TAS received the AFC delegation from the airport and arranged for them to be transferred to the Pullman Hotel. This team also arranged transport for match officials released after the group stage.

DOMESTIC TRANSPORT (AIR & ROAD)
An Operations Desk, managed by two volunteers, was set up to manage the local transport arrangements for the daily training sessions, departure of referee assessors and match officials transfer to the domestic airport in Sydney for matches in Brisbane and Melbourne. The Operations Desk also arranged road transfer for the match officials to venues in Newcastle and Canberra. For all match venues outside Sydney, the referee assessors departed two days before the match day to attend the Match Coordination Meeting (MCM), while the match officials departed one day before the match. For the matches in Newcastle and Canberra, the referee assessors departed on domestic flights while the match officials travelled by luxury van before the match day. The referee assessors returned to Referees HQ together with the match officials by luxury van after the match.

HOTEL AT MATCH VENUES
TAS managed room bookings for the assessors and match officials, with full board entitlement including transport to the hotel, stadium and airport etc.
The AFC Referees Committee selected eleven trios from AFC member associations while one trio was invited from the Oceania Football Confederation (OFC). The AFC also selected three reserve trios and three reserve referees from Asia. The match officials were selected for AFC Asian Cup Australia 2015 based on their performance in FIFA and AFC Competitions.

Prior to this competition, these match officials were appointed to two AFC tournaments, namely the AFC U-16 Championship Thailand 2014 and the AFC U-19 Championship Myanmar 2014. The main instructors for the AFC Asian Cup Australia 2015 were appointed to monitor the performance of the referees during the above competitions. This helped the AFC to identify the positive points and areas in which the match officials need to improve, primarily in communicating and understanding each other in the field of play.

### AFC REFEREERING DELEGATION

#### MAIN TRIOS

**Trio-1**
Benjamin Jon Williams (AUS)  
Matthew James Cream (AUS)  
Paul Adam Cetrangolo (AUS)

**Trio-2**
Nawaf Abdulla Ghayyath Shukraa (BHR)  
Yasar Khalil Ebrahim Abdulla Tulefi (BHR)  
Ebrahim Mubarak Sali Moosa Salah (BHR)

**Trio-3**
Ali Reza Mohammadi Faghani (IRN)  
Reza Sokhandan Ebrahim (IRN)  
Mohammadreza Hossein Abdolfazli (IRN)

**Trio-4**
Ryuji Sato (JPN)  
Toru Sagara (JPN)  
Tosshiyuki Nagi (JPN)

**Trio-5**
Jong Hyeok Kim (KOR)  
Hae Sang Jeong (KOR)  
Kwangyeol Yoon (KOR)

**Trio-6**
Abdulrahman Mohammed Hussain (QAT)  
Taleb Salem Al-Marri (QAT)  
Ramzan Saeed Al-Naemi (QAT)

**Trio-7**
Mohammed Abdul Wahab Alhammadi (UAE)  
Mohamed Ahmed Youssef Abdulrahman (UAE)  
Hasan Mohamed Hassan Abdulraheem (UAE)

**Trio-8**
Abu Bakar Salim Mahad Al Amri (OMA)  
Abdulrahman Fahad AlShunaidi (OMA)  
Al Shalwa Abdulla Mutab (OMA)

**Trio-9**
Mohammed Abdul Waheeb Alhammadi (UAE)  
Mohammed Abdul Wahab Alhammadi (UAE)  
Hasan Mohamed Hassan Abdulraheem (UAE)

**Trio-10**
Almirdasi Fahad Adwan (KSA)  
Abdulhamid Allahwalla (KSA)  
Bakhytbaev Bakhadyr (KGZ)

**Trio-11**
Abdulrahman Mohammed Masoud Al Hilali (OMA)  
Hamed Sulaiman Marhoun Al Mayahi (OMA)  
Abu Bakar Salim Mahad Al Amri (OMA)

**Trio-12**
Ali Reza Mohammadi Faghani (IRN)  
Reza Sokhandan Ebrahim (IRN)  
Mohammadreza Hossein Abdolfazli (IRN)

*Christopher James Beath (AUS) was replaced by reserve referee Beath Christopher James Beath (AUS) due to health reasons.*
RESERVE TRIOS

The primary role of the Reserve Trios was for the referees to be assigned as fourth officials and for the assistant referees to be assigned as fifth officials. The fifth official also performed the role of ‘standby’ assistant referee in the match and would replace any of the assistant referees on duty if they were injured during the match.

Their secondary role of the Reserve Trio was to replace any of the main match officials who were not able to continue due to injury or any other reasons.

**Reserve Trio-1**
- Mohd Amirul Izwan Yaacob (MAS)
- Mohd Yusri Muhamad (MAS)
- Azman Ismail (MAS)

**Reserve Trio-2**
- Muhammad Taqi Ajaafar Aljahari (SIN)
- Goh Gek Pheng Jeffrey (SIN)
- Akane Yagi (JPN)

**Reserve Trio-3**
- Crishantha Dilan Perera Hettikankanamge (SRI)
- Palitha Parakkrama Hemathunge Deniya Gedara (SRI)
- Najah Raham Raisind Alhamaladi (IRQ)

**Reserve Referees**

The reserve referees were assigned only as fourth officials for all the matches. If any of the main referees were unable to continue, they would have replaced the main referees accordingly.

**MAIN REFEREE INSTRUCTORS**

The role of the Main Referee Instructors was to monitor the performance of referees and assistant referees in the field of play and to review all ‘live’ matches at the media centre in Sydney Stadium. They selected specific match incident clips to analyse the referees’ performance, which would then be discussed at match debriefings. They also planned and conducted daily practical training sessions for the referees and assistant referees.

**REFEREE INSTRUCTORS/ASSESSORS**

Their main duty was to assess the performance of the referees and assistant referees in the field of play as venue assessors. They also assisted the Main Referee Instructors in all practical training sessions.

**PHYSICAL FITNESS INSTRUCTORS**

Their main duty was to assess the level of fitness and physical performance of the match officials in the field of play. They also planned and conducted physical training activities according to requirements. The fitness instructors also conducted recovery sessions in the swimming pool and the gymnasium.

**AFC REFEREES’ SECRETARIAT**

The Referees’ Director and staff managed all operational needs of the referees’ delegation. The Director also proposed the appointments of match officials to the AFC Referees Committee, based on the referees’ current performance, neutrality, physical and mental condition.

The staff worked together with all AFC instructors in preparing all practical training sessions and worked with LOC Referees’ Department for the arrangements of community players and the logistics. They also assisted in preparing the incident clips for match analysis and match debriefings.

The staff also coordinated with the Competition Department on appointment matters.

The staff also worked together with Transport and Accommodation Service (TAS) for the match officials accommodation at match venues outside Sydney, transport for training in Sydney and also transport and accommodation arrangements at four other match venues, meals and other needs.

The Audio Video (AV) Specialist assisted in producing the incident clips for match analysis and debriefing. These clips were also used to produce future teaching materials.

1. Yoshimi Ogawa     Referees’ Director
2. Abdul Razak bin Anuar  Head of Operation
3. Ameez Mohamed     Manager Referees’ Development
4. Cynthia Carvalho   Secretary
5. Zameer Taleq      Head of AV Unit (AV Specialist)

**REFEREE TECHNICAL REPORT**
LOC SUPPORT DELEGATION

FFA REFEREES DEPARTMENT

Two staff from Football Federation of Australia (FFA) were appointed to assist on a number of matters including logistics, arrangements of Liaison Officers at each venue, and the provision of community players for practical training. They also coordinated with other Liaison Officers at the match venues outside Sydney.

1. Ben Wilson   Head of Referees
2. Michael Bailey   Administrator

REFEREES LIAISON OFFICERS (HQ)

There were three Liaison Officers (LOs) assigned to assist in all logistic needs throughout the competition at the headquarters. The LOs ensured the transport, all training equipment, and water and ice were available before the start of the training sessions. When matches were played in Sydney Olympic Stadium, they looked after the needs of the match officials as well.

REFEREES LIAISON OFFICERS (MATCH VENUES)

One Liaison Officer (LO) was also assigned at each match venue. The LO assisted in the airport and hotel reception for the match officials and they also ensured that the transport, communication system, beep flags and all other operational requirements were available before, during and after the matches.

COMMUNITY PLAYERS

Players from the local community assisted in daily practical training sessions.

MASSEURS

Two masseurs were assigned daily and based in the HQ Referee’s Lounge. The masseurs provided therapeutic massage service for the match officials to aid their recovery from muscle fatigue after matches. The masseurs worked on rotation basis and provided advice to the fitness instructors regarding any injury suffered by any of the match officials.

FIRST AID SUPPORT

One First Aid Medical Assistant and an ambulance were stationed at the training ground daily. The Medical Assistant provided medical coverage at the training field.

PRE-COMPETITION

ADMINISTRATION

A number of activities were organised prior to the start of the competition:

TEAM WORKSHOP

An exclusively designed session on technical refereeing matters took place during a two-day workshop for teams participating at the 2015 AFC Asian Cup, which took place in Kuala Lumpur on 29 and 30 September. The session was aimed at ensuring the smooth management of the tournament by encouraging the support and understanding from the competing teams. Included was a specially produced DVD titled ‘Top Topics for AFC Asian Cup 2015,’ which featured footage highlighting various match situations.

TEAM ARRIVAL MEETING

The Referee Technical Instructors met all participating teams prior to the start of the competition to brief them on refereeing technical matters. The meeting was conducted four days before the start of the respective team’s first match. The players and the technical staff showed great interest and were very interactive during these sessions. A Multimedia DVD containing clips of match situations and information pertaining to the interpretation of the Laws of the Game was also distributed to the participants.

LOC COORDINATION MEETING

Prior to the arrival of AFC Delegates, who came in various stages before the competition commenced, a coordination meeting with the LOC and the FFA assigned Referees Coordinators was held in mid-November 2014. Various topics were discussed at the meeting including: the required number of Liaison Officers; sourcing players to support the trainings sessions; the training field and equipment; and transportation during matches in Sydney and other venues.
AFC ON THE FIELD (E-LEARNING PORTAL)

Prior to the FIFA World Cup Brazil 2014, the AFC initiated ‘AFC On the Field’, an E-learning portal for the selected prospective referees and assistant referees. With the E-learning portal proving highly effective, the initiative continued for the match officials selected for the 2015 AFC Asian Cup.

One of the key elements in ensuring that the match officials had the required technical knowledge essential for Asia’s flagship national team tournament was a series of online ‘video tests’ that were conducted weekly from October through to the end of December.

FITNESS TEST

A fitness test was conducted in Kuala Lumpur on 9 December 2014, one month prior to the start of the competition. There was no fitness test conducted in Sydney although the match official underwent the fitness training and acclimatisation on the first day of the practical training.

THEORY SESSIONS

The theory sessions were designed to be interactive encourage more discussion when analysing specific match situations from video clips. From these sessions, there was a marked improvement in the match officials’ recognition and understanding of the Laws of the Game. Participation in the tests helped improve their knowledge base, which included how to recognise and differentiate the severity of fouls and misconduct and to be consistent with other match officials.

To have consistency on the recognition and management of fouls in the field of play, the match officials were instructed to follow the decisions by the technical instructors.

Daily group work and interactive sessions were also organised to improve teamwork among the trios.

A special session on report writing also was organised as part of the training. This was to ensure consistency and accuracy in the reports submitted by match officials.

TECHNICAL

To ensure that the shortlisted match officials were technically well prepared, the following activities were conducted before the competition:

SEMINAR FOR SELECTED REFEREES AND ASSISTANT REFEREES

The aim of the seminar was to ensure that the selected referees and assistant referees were given enough early preparation, technically, and physically to ensure they would meet the demands of top level refereeing.

Two seminars were conducted prior to the competition, with one taking place in Kuala Lumpur from 7 to 10 December 2014 and the other in Sydney from 4 to 8 January 2015.

KUALA LUMPUR

FITNESS TEST

A fitness test was conducted in Kuala Lumpur on 9 December 2014, one month prior to the start of the competition. There was no fitness test conducted in Sydney although the match official underwent the fitness training and acclimatisation on the first day of the practical training.

PRACTICAL SESSIONS

At the practical training sessions, players were engaged to recreate incidents that regularly happen in the field of play. The technical instructors reviewed the match officials’ reaction to these incidents and gave advice to them accordingly.

TEAM TACTICS & MEDICAL SESSION

Mr Kwok Ka Ming, FIFA/AFC Coaching Instructor, briefed the match officials on various aspects of the participating teams including: tactics, style of play, and the transition from defence to attack and many more. The referees were also briefed on the ‘star’ players who were expected to be appearing in the competition.

Dato’ Dr Guruchandran, Chairman of the AFC Medical Committee, briefed the match officials on health and medical care for themselves and also for the players. Many areas of medical care in the field of play were also highlighted.
A Special Preparatory Course was conducted at Sydney Olympic Park, starting on January 4 and ending on January 8, one day prior to the first match of the tournament.

The main aim of this course was to further enhance the technical knowledge of the referees and the assistant referees.

The course also touched on other matters such as the behaviour and conduct of the match officials and how they could raise the level of their officiating to a much higher level to reflect the status of the AFC’s most prestigious tournament.

**THEORY SESSIONS**

Thorough discussions and analysis of match incidents with the Technical Instructors gave the match officials a better understanding of various incidents and situations, aimed at ensuring a consistency in decision making decision and actions in all matches in the tournament.

**PRACTICAL SESSIONS**

Two training fields were used on the second day of the practical training sessions with the main field used to conduct a special session for the assistant referees on recognising offside situations, while the field adjacent to the main field was used to enhance the referees’ movement and positioning. The close proximity of the main training field and the adjacent field was a factor in the successful planning and running of the sessions.

**INSTANT FEEDBACK**

Decisions made by the match officials during the practical training sessions could be reviewed instantaneously with the match scenarios filmed and displayed immediately after they were conducted. This allowed individuals to review their positioning and movement as well as being able to identify their mistakes and receive immediate feedback and advice from the Technical Instructors, ensuring that such errors would be avoided during the competition.

An example of how ‘instant feedback’ was practically applied was during the special session on ‘offside’ for the assistant referees. Cameras were placed on the goal line and on a two-meter high platform with the footage displayed on a plasma TV placed located in a specially designated area.

One of the highlights of the competition was a motivational visit of AFC President Shaikh Salman bin Ebrahim Al Khalifa to the Referee’s HQ. In his speech the President congratulated the match officials on being selected for the Asian Cup and offered them words of encouragement for the tournament.
**DURING COMPETITION**

**MATCH ASSIGNMENTS**
In order for the Physical Fitness Instructors to ensure the match officials were well prepared for the games, matches were assigned at least three days before kick-off. The exception to this was for the semi-finals and final, with the announcements made two days before the match. For this competition, a Fifth Official was assigned at all the matches.

**PREPARATION OF MATCH DEBRIEFING MATERIALS**
All the matches were recorded with the AV specialist providing footage of specific match incidents that had been identified by the Technical Instructors immediately after the game.

Technical Instructors discussed the footage at the Secretariat on the same evening to select the clips that would be analysed and discussed at the match debriefing session the following day.

These discussions before debriefing sessions built a common understanding amongst the Technical Instructors regarding the strengths and weaknesses of the referees and the assistant referees’ and areas that required development.

**MATCH DEBRIEFING SESSIONS**
The aim of the match debriefing was to highlight and discuss the match incidents and decisions taken by the referees and assistant referees to enable the Main Technical Instructors to provide feedback and make recommendations on how they can enhance their performance.

The match debriefings were held in the afternoon after the referee trios’ recovery sessions once they returned from the match venues. It was attended by all match officials, except those who were assigned to venues outside Sydney.

Materials and instructions were shared online with the referees, assistant referees and technical instructors who were not at the Sydney HQ during the match debriefings, ensuring that a consistent and uniform message was received by all relevant parties wherever they were located during the competition.

**LIVE VIDEO ASSESSMENT**
Technical Referee Instructors, assisted by a staff from the AFC Referees Department and an AV (Audio Visual) Specialist, reviewed all the matches ‘live’ in the main Media Centre at Stadium Australia in Sydney. The centre was equipped with an HD (High Definition) television, video editing equipment and other essential AV equipment needed to assist with the editing.

**VENUE ASSESSMENT**
Referee Assessors were assigned to observe the match officials’ performance at the match venues. The Referee Assessors carefully monitored the performances of the referees and provided feedback to the Technical Instructor at the media centre for ‘real time’ review and discussion on certain match incidents.

**INDIVIDUAL TRIO MATCH DEBRIEFING**
After the match debriefing sessions, the referee trios received feedback specifically on their matches from the Technical Instructors. Using the match debriefing materials, the trio received comprehensive details of their strengths as well as on areas for development to enhance their performance in future matches.

**DAILY PROGRAMME (PRACTICAL)**
Daily practical training sessions were conducted throughout the duration of the competition. During the practical training sessions, match incidents that happened in real match situations were re-enacted for the referees, whose decisions were analysed by the Technical Instructors. This feedback improved consistency in recognition of fouls and the appropriate action to be taken. These exercises and drills proved invaluable in ensuring high quality of refereeing throughout the competition.

**DAILY COORDINATION MEETINGS**
Daily coordination meetings were held after each match day to decide the training programme of the following day. Items such as the requirements of players, training equipment, and departure times were confirmed while alternative plans in case of bad weather were also discussed. The meeting also confirmed the transportation for the departure/arrival of match officials for matches away from Sydney.
The performance of the referees and assistant referees was very good and met the expectations and demands of the competition. The referees and the assistant referees were able to recognise the fouls accurately and take appropriate sanctions during the thirty two matches they officiated throughout the tournament. On occasions the consistency and uniformity in recognition of these fouls, however, could have been better although such errors were meticulously analysed during the daily practical training sessions to minimise the chances of them being repeated in subsequent matches.

Of the ten penalty incidents during the competition, nine were awarded correctly while one should have been given but was not. When the decision of not awarding the penalty was analysed, it showed that the referee had misinterpreted the Laws of the Game. This incorrect decision was shared and discussed during the match debriefing session.

A total of 85 goals were scored during the tournament while one was disallowed for offside, with all the decisions pertaining to these correct.

The performance of the referees and assistant referees was very good and met the expectations and demands of the competition. The referees and the assistant referees were able to recognise the fouls accurately and take appropriate sanctions during the thirty two matches they officiated throughout the tournament. On occasions the consistency and uniformity in recognition of these fouls, however, could have been better although such errors were meticulously analysed during the daily practical training sessions to minimise the chances of them being repeated in subsequent matches.

Of the ten penalty incidents during the competition, nine were awarded correctly while one should have been given but was not. When the decision of not awarding the penalty was analysed, it showed that the referee had misinterpreted the Laws of the Game. This incorrect decision was shared and discussed during the match debriefing session.

A total of 85 goals were scored during the tournament while one was disallowed for offside, with all the decisions pertaining to these correct.

A match average of 3.8 yellow cards and 0.16 red cards was lower than that of the AFC Asian Cup Qatar 2011, with the Technical Instructors suggesting that the reduced number of sanctions was due to the referees’ adopting a game management style that emphasised ‘prevention rather than reaction’. This approach was highlighted many times during the seminars prior to the competition.

Good referees with a higher understanding of football and the severity of fouls committed by the players allow the play to flow within the Laws of the Game and thus add to the entertainment value of the match. Referees were encouraged to manage the situations first before issuing cautions but only if the offences fall under the recommended considerations.

Match officials received many compliments and positive feedback for the quality of their performances during competition and this augers well for the AFC.

Generally, the movement and positioning of the referees and assistant referees was very good.

Having observed and analysed their performances during the AFC U-16 and AFC U-19 Championships, the Technical Instructors were able to identify any shortcomings in the referees and assistant referees’ movement and positioning and improve this during special practical training sessions at the seminars in Kuala Lumpur and Sydney.

Being top class referees, they were extremely self-disciplined with very high fitness and physical levels, which they were able to maintain on their own with minimal supervision.

Thanks to the session conducted by AFC coaching instructor, Kwok Ka Ming and the technical instructors, the referees and the assistant referees were made aware of the current trend of play and tactics of the participating teams and thus better able to position themselves appropriately during the matches.

Modern football is fast-paced and dynamic, with tactics emphasising controlling the play with longer possession, quick passes and ‘off the ball’ running. Positions when attacking and defending are interchangeable with players moving constantly to receive the ball and create goal-scoring opportunities.

Adapting to the modern game, the days of referees moving rigidly on the ‘diagonal running system’ and being instructed to move as nearer as possible to play even in the penalty area are gone.

The current trend is for the referee to use the wide diagonal system and be close enough to see play without interfering with it. Referees were also recommended to stay outside of play to make it easier to keep the action, as well as the assistant referee, within their field of vision.

The referee needs also to be aware of what is taking place outside the vicinity of the ball with possible offences taking place in the areas where the play is heading or after the ball has been played away.

Thanks to the session conducted by AFC coaching instructor, Kwok Ka Ming and the technical instructors, the referees and the assistant referees were made aware of the current trend of play and tactics of the participating teams and thus better able to position themselves appropriately during the matches.
A. PRACTICAL TRAINING EXERCISE (Few examples)

Diagram 1: Teamwork

Diagram 2: Penalty Area Situations

Diagram 3: Offside

B. STATISTICAL DATA

1. Cards (Yellow & Red) – Comparison 2011 & 2015

2. Summary of Yellow Card
3. Summary of Red Card

<table>
<thead>
<tr>
<th>Category</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious Foul</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOSSO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denying a Goal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Yellow</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Added Time

<table>
<thead>
<tr>
<th>Time</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added Time 1st Half</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Added Time 2nd Half</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Added Time 1st Extra Half</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Added Time 2nd Extra Half</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Summary of overall performance of referees

<table>
<thead>
<tr>
<th>Category</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fouls &amp; Misconduct</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Match Control</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Positioning &amp; Movement</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Teamwork</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

6. Summary of overall performance of assistant referees

<table>
<thead>
<tr>
<th>Category</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offside</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Flag Technique</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Positioning &amp; Movement</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Teamwork</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>
7. Summary of activities

<table>
<thead>
<tr>
<th>Activities</th>
<th>Preparatory Theory Sessions</th>
<th>Field Training</th>
<th>Colating</th>
<th>Trial Meeting</th>
<th>Match Analysis Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>8</td>
<td>33</td>
<td>34</td>
<td>5</td>
<td>40</td>
</tr>
</tbody>
</table>

8. Evaluation Result

<table>
<thead>
<tr>
<th>Test</th>
<th>Highest %</th>
<th>Lowest %</th>
<th>Average %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Test 1 (Handball)</td>
<td>90</td>
<td>50</td>
<td>72</td>
</tr>
<tr>
<td>Video Test 2 (Offside)</td>
<td>100</td>
<td>70</td>
<td>86</td>
</tr>
<tr>
<td>Video Test 3 (Severity of Foul)</td>
<td>70</td>
<td>40</td>
<td>56</td>
</tr>
<tr>
<td>Laws of the game Trivia Test</td>
<td>95</td>
<td>25</td>
<td>71</td>
</tr>
<tr>
<td>Laws of the game On the Screen</td>
<td>100</td>
<td>65</td>
<td>83</td>
</tr>
</tbody>
</table>

REFEREES, THE 17TH TEAM

In major competition like this where 16 teams compete, the Referee’s Team is considered the 17th team. They went on the field of play and stood neutral when blowing their whistle to start a match. The Referee’s Team is an important element in a match as their decisions could increase or decrease the value of the game.

Like athletes, referees undergo intensive physical and technical training and in addition to needing a high level of fitness they must also possess mental and psychological strength to meet the demands of modern football.
OBJECTIVES OF THE PHYSICAL AREA

The objectives were as follows:

• to provide a specific match day orientated fitness programme
• to minimise risks of injuries (preventive)
• to collect valuable experience and fitness data for feedback and research purposes

TOURNAMENT DATA

All the personal data of the match officials was compiled and confirmed during the AFC Referees & Assistant Referees Course 2015 in December 2014 in Kuala Lumpur.

FITNESS TEST RESULT ANALYSIS

The pre-tournament fitness tests which comprised the ‘speed test and high intensity test’ were conducted in Kuala Lumpur during the AFC Referees & Assistant Referees Course 2015. The match officials also underwent the ‘Yo-Yo Intermittent Recovery Test’ to check their agility and physical strength. All match officials selected for this tournament successfully met the minimum requirements for the pre-tournament fitness test.

There was no fitness test conducted in Sydney but the match officials underwent fitness training and acclimatisation on the first day of the practical training.

FITNESS TEST REPORT

Copies of the individual test certificates as well as the heart rate analysis reports for the fitness test and yo-yo intermittent test level 1 (YYIRT-1) were provided to all the match officials during the AFC Referees & Assistant Referees Course 2015.

WEIGHT CONTROL DATA

Weekly measurement (weight & resting heart rate) was taken during the tournament, to monitor the balance between “caloric consumption” (the amount of food & beverage intake), and “caloric expenditure” (the amount of training load, from practical training sessions and matches). Emphasis was given to “maintenance” of the match officials’ health condition from start to finish of their tournament duty. Resting heart rate, measured in the morning immediately after waking up, was monitored as supplementary information to confirm the health status and fatigue level of each match official.

TRAINING PLAN (PROGRAMME OUTLINE)

Daily planning to prevent training monotony (repetitive content) was used. Effort was made to make sure that all the match officials underwent different types of training programmes to keep them active, motivated, and stimulated.
PRESENTATIONS

INTRODUCTION TO FITNESS PREPARATION
A presentation was given during the Preparatory Course on January 4, 2015. It was an introduction to the Physical Area, with information necessary for day-to-day operation of the refereeing activities, specifically related to fitness condition maintenance.

MATCH PREPARATION
Another presentation was also given during the Preparatory Course on January 7, 2015. Information regarding the MD-1 (match day minus one) programme, as well as additional ‘fitness self-maintenance’ information for the fourth and fifth officials who had to travel for several consecutive days outside Sydney HQ during the Group Stage, was given.

- Warming up (20’)
  - Pre-match warming up routine
- 2 sets of 6 accelerations = 3 laps, by trio (10’)
  - Short stretching break in-between sets
- Additional work, per individual (5’)
  - As necessary
- Cooling down (10’)
  - Walking
  - Stretching
- Total = 45’

FITNESS CONDITIONING / MONITORING USING HEART RATE MONITOR (HRM) SYSTEM

TRAINING LOAD & KCAL
HRM data analysis using the Polar Team2 software was used to calculate the training load scores and caloric expenditure figures based on individual personal properties data.

MATCH HEART RATE MONITOR (HRM) DATA ANALYSIS
From the HRM data analysis an average and maximum heart rate (%HRmax) was recorded during each half as well as extra time for the referee trio for each match was used to calculate the overall maximum, average and minimum for statistical analysis.
FATIGUE LEVEL

HRM data analysis was recorded to predict the fatigue level (freshness scale) of the match officials based on individual personal properties data and daily training load (intensity and duration). Emphasis was given to ensuring the appointed referee trios were physically ‘fresh’ going into the match.

TRAINING REPORT

Sample data of some of the fitness training programme provided during the tournament, with corresponding HRM report for each activity, was used to illustrate the corresponding training intensity. The HRM data was monitored each day to make sure that cumulative fatigue due to over-training was avoided as much as possible.

Training Load & Recovery Report

Every morning prior to training and matches, HRM reports showing the effects of daily training load (intensity and duration), cumulative fatigue, and the rate of recovery, were reviewed to predict the ‘freshness’ of each match official.

DURING COMPETITION

TRAINING PLAN (OVERVIEW)

Daily planning, based on match appointments were used.

TRAINING SESSION GROUPINGS

Daily groupings based on match appointments, with specific physical intensity adjustments for the “pre-match preparation group” (MD-) and “post-match recovery group” (MD+) were used.

PLAY TIME SUMMARY

Actual match time (duration) data, from first-half half kick-off to half-time and second-half kick-off to full-time, including extra time, was collected and analysed.

MATCH PREPARATION

All match officials underwent daily practical training sessions on the field of play. Generally, technical sessions were low to moderate aerobic intensity and physical sessions were moderate to high aerobic intensity. Content of each training session was carefully monitored and controlled to make sure that over-training was not an issue. The duration of a typical training session was approximately 90 minutes, starting from 0800 to 0930 hrs.

Weather in Sydney was not an issue. The duration of a typical training session was approximately 90 minutes, starting from 0800 to 0930 hrs.

Recovery Sessions

SWIMMING POOL

Short “MD+1” (match day plus one) post-match recovery sessions (approximately 30 minutes) using the swimming pool (walking lane reserved specifically for the match officials) was mandatory immediately after return from the match venue. This was to minimise post-match muscle soreness, maintain muscular flexibility, and to promote mental relaxation (release from match stress).

GYMNASIUM

Optional unsupervised training sessions were available in the hotel fitness centre for anyone who wanted to do injury prevention and health maintenance exercises in addition to the practical training sessions on the field of play. The gymnasium was also used as an alternative training session on a couple of occasions when the weather was not good (rain).

Gymnasium training was also utilised as an additional ‘fitness self-maintenance’ programme for the fourth and fifth officials who had to travel for several consecutive days outside Sydney HQ during the Group Stage. HRM data was collected and analysed upon their return to Sydney.

FITNESS CONDITION MONITORING THROUGH MASSAGE TREATMENT

Daily physiotherapy treatments were necessary and highly recommended (but not compulsory) especially pre and post matches.

PHYSIOTHERAPY

A 30 minute massage therapy service was available for the match officials. Two masseurs were present every day from 1100 to 1230 hrs and 1330 to 1500 hrs totalling 12 treatment slots per day. Masseurs provided immediate feedback after the service as needed.

During the tournament, there were no serious musculoskeletal injuries and most of the cases were normal muscular tightness due to post-training or post-match muscular fatigue.

MEDICAL

In this tournament, there were no serious musculoskeletal injuries to warrant orthopaedic care. Combinations of massage therapy and recovery sessions were adequate enough to control any musculoskeletal concerns and the ability to return to full activity.
From a physical performance point of view, all match officials performed at the highest level during this tournament. It is clear from the pre-tournament fitness test results (sprint times and interval running aerobic performance) that these match officials are the top referees and assistant referees that Asia has to offer.

All match officials were highly experienced and mature with the ability to self maintain. All of them knew exactly what they had to do each day in order to be well prepared and physically ready for every training session and match.

Based on the figures from weight control, all match officials were able to ‘maintain’ their physical condition from start to finish, with minimal effects of fatigue build-up.

Based on training load, caloric expenditure, and fatigue level calculation using the Polar Team2 software, it was clearly evident that physical ‘freshness’ was achieved throughout the tournament.

As for match physical intensity the average referees’ heart rate was at 84% HRmax, and assistant referees’ heart rate was at 73% HRmax which fall under the maximum heart rate on 100%HRmax. This physical intensity was maintained in both halves of all the games and in extra-time of four knockout stage matches. There was no evidence of decline with regards to physical performance and all match officials were able to perform at the highest level from the 1st to the 90th minute of play.

Overall, the physical performance of the match officials during this tournament was highly satisfactory and successful.

EMERGENCE OF A NEW GENERATION OF TALED TALENTED REFEREES

Another cause of satisfaction from a refereeing standpoint, which was also a highlight of the AFC Asian Cup Australia 2015, was the emergence of new generation of talented referees. Opportunities were given to these new talents to handle high profile and important matches and they performed well above expectations. The excellent performance by this new generation of AFC referees and assistant referees must be mentioned as this was first time that they officiated at the Confederation’s highest competition.

FURTHER STEPS

The holistic approach to the referees and assistant referees educational programme, monitoring their physical fitness and well being, and the continuous effort by the AFC in planning an effective referee development programme bore fruit in preparing the match officials and contributed to their outstanding performance at the AFC Asian Cup Australia 2015.

What was learned from the previous edition of the AFC Asian Cup was taken into consideration when planning for the 2015 tournament to ensure that the positive aspects of Qatar 2011 were maintained and necessary improvements were made.

Enhanced training programmes were introduced while better tools and equipment were acquired to ensure that the prestigious competition was a success.

In the technical area, intensive training sessions prior to the start of the tournament and the ‘instant feedback’ implemented at many training sessions and during the competition was found to be very beneficial and constructive.

CONCLUSION

Meanwhile in the physical fitness area, the professional approach in conducting specific training and the exercises prepared and conducted scientifically, focusing and concentrating on the targeted objectives, ensured that the match officials were fresh and in optimum fitness before each match.

With the support provided by the masseurs and the close monitoring of their physical wellbeing by the Physical Fitness Instructors, the referees and the assistant referees did not sustain any injuries. Priority was also given to other aspects, such as the comfort and wellbeing of the match officials to ensure that their high-level performance throughout the competition was maintained.

AFC top referees and assistant referees now need to constantly keep abreast of the new developments in refereeing and continue to strive for self improvement. Their technical and physical performance on the field of play should be continuously monitored to ensure that they progress well and are able to give their best performance when appointed for top level AFC competitions.

The technical instructions and quality practical training and match analysis sessions proved to be an effective tool in preparing the top referees and assistant referees throughout the competition and these should continue for further improvement and development.

The professional and comprehensive programmes that were planned and carried out successfully ensured that the AFC’s objectives and targets for excellent performances during the flagship competition were achieved.

Our challenge now is to keep on improving for the coming AFC Asian Cup UAE 2019 and we are moving in the right direction in our approach to plan and prepare the referees and the assistant referees, not only for the next AFC Asian Cup but for all AFC and FIFA competitions.
We wish to acknowledge the following for their contribution in making the refereeing activities a success:

- The AFC President and the Referees Committee for the excellent support and advice given during the competition
- Football Federation Australia & the LOC for the coordination of transport and other logistics needed throughout the competition
- The AFC top referees and assistant referees for their hard work and dedication
- AFC/FIFA Technical and Fitness Instructors for their expert advice
- All those other individuals and groups who assisted in whatever capacity
ANNEX

FITNESS TRAINING EXERCISE (Few examples)

Diagram 1

Quarter pitch:
touch line = JOG
diagonal = RUN
goal line = WALK
diagonal = RUN
Centre mark to goal = JOG
goal line = WALK

Start / Finish

Diagram 3

Full pitch (PA to PA):
1) white cone
2) blue cone
3) yellow cone
4) red cone
pitch = RUN
penalty area = JOG / WALK
* 1-2-3-4 or 4-3-2-1
* CW or CCW

Start / Finish

Diagram 2

Half pitch:
halfway line = JOG
diagonal = RUN
touch line = WALK
diagonal = RUN
goal line = JOG
touch line = WALK

Start / Finish

Diagram 4

Start = JOG
RUN (2 cones)
JOG (1 cone)
Finish = WALK
HI (return) = repeat 2x
MI (return) = JOG / WALK

Start / Finish