

infront



BWF BROADCAST

BWF WORLD TOUR

TV PRODUCTION GUIDELINES 2023

CONTENTS

1. General Information	
- Contacts -----	5
- Staff Contacts (BWF) -----	5
- Staff Contacts (Infront Pan-Asia Pte. Ltd.) -----	6
2. Host Broadcaster Production -----	7
3. On Screen Graphics Package (OSGP) -----	8
- Opening and Closing Title Sequence	
- Break Bumpers	
- Replay Transition/ Wipe Pattern	
4. Host Broadcaster Kit -----	8
5. Broadcast Identity -----	8
6. Technical Set Up -----	9-17
- Minimum Coverage Standards/Matches	
- World Tour Finals	
- Super 1000	
- Super 750	
- Super 500	
- Super 300	
- Camera Plans	
- Description	
7. Host Broadcaster Production -----	18-22
- Crew	
- Match Direction	
- Slow Motion Replay Direction	
- Audio Configuration	
- End to End Test	
8. Host Broadcaster TV Meetings -----	23
9. Host Broadcaster World Feed Rehearsals -----	24
10. Host Broadcaster World Feed Deliverables-----	24

11. Venue Set Up -----	25
- Power Supply	
- Camera Platforms	
- Commentary Positions	
- OB Van, SNG Parking	
12. Satellite Distribution -----	26
13. Match Recording -----	27
14. Match Scheduling -----	27
15. GRAPHICS PARTNER (OSGP) AE-Live-----	28
- Graphics Software and Hardware	
16. AE-Live Graphics Technical Integration -----	28-31
17. Hawk-Eye IRS Technical Integration-----	32
18. World Feed Commentary Requirements-----	33-34
19. Other Considerations -----	35
20. Additional Host Broadcaster Services & Considerations-----	35-36
- Rate Card	
- Tournament Media Rights	
- Onsite Content Feed	
- Communication	
- Add On Equipment	
- Power	
- Cabling	

21. Web Streaming Setup	37
22. Media Principles – FOR HB RTV NRH	38
- Respect of Field of Play	
- Respect of Officials	
- Respect of Spectators	
- Respect of Players and Coaches	
- Respect of Other Media	
23. Prize Presentation and Prize Presentation Protocol	39

1. GENERAL INFORMATION

BADMINTON WORLD FEDERATION

Unit #01 Level 29, Naza Tower
10 Persiaran KLCC 50088
Kuala Lumpur, Malaysia
PH: +603 2141 7155
FAX: +603 2143 7155

www.bwfbadminton.com
www.bwfcorporate.com
www.bwfshuttletime.com

Selvam Supramaniam	Deputy Events Director	s.supramaniam@bwf.sport
Matt Judson	Tournament Series Manager	m.judson@bwf.sport
Ruvian Ruslan	Tournament Series Manager	r.ruslan@bwf.sport
Zsafia Horvath	Tournament Series Manager	Zs.horvath@bwf.sport

INFRONT PAN-ASIA PTE. LTD.

300 Beach Road
#13-02/04, The Concourse
Singapore 199555
PH: +65 6829 2500
FAX: +65 6829 2410

www.infrontsports.com

Charlie Risso- Gill	Executive Producer	charlie.risso-gill@infrontsports.com
John Adamson	Executive Producer - Live	john.adamson@infrontsports.com
Brian Lee	Broadcast Services Manager	brian.lee@infrontsports.com
May Chew	Production Manager	may.chew@infrontsports.com

2. HOST BROADCASTER PRODUCTION

These Guidelines are for use by BWF Host Broadcasters and BWF Rights Holding Broadcasters to plan their production and coverage of the BWF World Tour Series. They outline the roles, responsibilities and obligations of Host Broadcasters when producing the International World Feed signal.

The Host Broadcasters priority is to produce the **World Feed** coverage of the event. Host Broadcasters are obliged to follow the guidelines.

All domestic unilateral production, add-ons and ancillary feeds are secondary and must not impinge on the **World Feed Production**.

For all BWF World Tour events, Infront Pan-Asia will supply

- Executive Producer - Live
- Broadcast Services Manager
- Graphics Producer and Graphics Equipment
- Opening Titles, Replay Wipe, Music, Closing Titles
- Hawke-Eye Line call system

The Executive Producer and the Broadcast Services Manager will supervise all Host Broadcast Operations and World Feed Production.

The Infront Pan-Asia Executive Producer will give direct instructions to the Host Broadcaster to ensure the World Feed is produced to BWF requirements. The Host Broadcaster must comply with these instructions.

Broadcasters should provide an appropriate e-mail address to Infront Pan-Asia's:

- **John Adamson** | Executive Producer - Live - john.adamson@infrontsports.com
- **Brian Lee** | Broadcast Services Manager – brian.lee@infrontsports.com

Please provide contact details for the following personnel and locations to the above Infront Pan-Asia personnel.

- Head of Sports Production
- Match Producer
- Match Director
- Match Audio Director
- Head of Engineering OB Unit Manager or Senior Engineer

3. ON SCREEN GRAPHIC PACKAGE (OSGP)

An **On Screen Graphics Package** has been developed to deliver this unique and effective brand identity to the World Feed Television Production. The OSGP includes score and match graphics as well as video and animation elements as per below:

(A) Opening and Closing Title Sequence

Opening and Closing Title sequences have been created for use before and after the television transmission and **MUST** be used for all broadcasts.

The sequences created include specifically arranged music tracks that reflect the values of the BWF World Tour.

(B) Break Bumpers

Short, high impact break bumpers have been created. These are to be used before and after each commercial break or fixed pause in play.

(C) Replay Transition/Replay Wipe

A distinct replay transition/replay wipe is to be used when inserting slow motion replays.

4. HOST BROADCASTER KIT

All Host Broadcasters and Rights Holding Broadcasters will receive a Rights Holder kit, which will include the following:

1. 1 x Download link to **BWF World Tour** Opening Title Sequence
2. 1 x Download link to **Replay Transition**
3. 1 x Download link to **World Feed Music Elements**
4. 1 x Download link to **Broadcaster Manual**
5. 1 x **Corporate Identity Manual** (BWF World Tour Series)

5. BROADCAST IDENTITY

The BWF World Tour broadcast identity is a unique and valuable promotional tool to bring the BWF World Tour brand to life.

The inspiration for the design was based on the colours, look and feel of the BWF World Tour. The design concept that has been created, is a fully integrated concept, with both on air and off-air look, that has been developed to be used in print and web advertising, studio set designs and for general promotional purposes.

6. TECHNICAL SET UP – BWF WORLD TOUR FINALS

The minimum production and delivery standards that apply to the Main TV Courts are as follows:

- Production shall be HD 1080i/50

Please note the following minimum Camera and TV match volume requirements:

BWF WORLD TOUR FINALS

BWF WORLD TOUR FINALS - 2023 - 2026					
DAY	STAGE	COURT 1	MATCHES	COURT 2	MATCHES
DAY 1 (WEDNESDAY)	GROUP	X	10	X	10
DAY 2 (THURSDAY)	GROUP	X	10	X	10
DAY 3 (FRIDAY)	GROUP	X	10	X	10
DAY 4 (SATURDAY)	SEMIFINALS	X	10		
DAY 5 (SUNDAY)	FINALS	X	5		
TOTAL	75 MATCHES PER TOURNAMENT				

TECHNICAL SET UP – BWF WORLD TOUR SUPER 1000

COURT 1 - MINIMUM 10 CAMERAS (COURT 2 - MINIMUM 6)

BWF WORLD TOUR (SUPER 1000) 2023 - 2026					
DAY	STAGE	COURT 1	MATCHES	COURT 2	MATCHES
DAY 1 (TUESDAY)	ROUND 32	X	10		
DAY 2 (WEDNESDAY)	ROUND 32	X	10	X	8
DAY 3 (THURSDAY)	ROUND 16	X	10	X	8
DAY 4 (FRIDAY)	QUARTERFINALS	X	10	X	8
DAY 5 (SATURDAY)	SEMIFINALS	X	10		
DAY 6 (SUNDAY)	FINALS	X	5		
TOTAL	79 MATCHES PER TOURNAMENT				

TECHNICAL SET UP - BWF WORLD TOUR SUPER 750

COURT 1 - MINIMUM 10 CAMERAS (COURT 2 - MINIMUM 6)

BWF WORLD TOUR (SUPER 750) 2023 - 2026					
DAY	STAGE	COURT 1	MATCHES	COURT 2	MATCHES
DAY 1 (TUESDAY)	ROUND 32				
DAY 2 (WEDNESDAY)	ROUND 32	X	10		
DAY 3 (THURSDAY)	ROUND 16	X	10	X	8
DAY 4 (FRIDAY)	QUARTERFINALS	X	10	X	8
DAY 5 (SATURDAY)	SEMIFINALS	X	10		
DAY 6 (SUNDAY)	FINALS	X	5		
TOTAL	61 MATCHES PER TOURNAMENT				

TECHNICAL SET UP - BWF WORLD TOUR SUPER 500

MINIMUM 9 CAMERAS

BWF WORLD TOUR (SUPER 500) 2023 - 2026					
DAY	STAGE	COURT 1	MATCHES	COURT 2	MATCHES
DAY 1 (TUESDAY)	ROUND 32				
DAY 2 (WEDNESDAY)	ROUND 32				
DAY 3 (THURSDAY)	ROUND 16	X	8		
DAY 4 (FRIDAY)	QUARTERFINALS	X	8		
DAY 5 (SATURDAY)	SEMIFINALS	X	8		
DAY 6 (SUNDAY)	FINALS	X	5		
TOTAL	29 MATCHES PER TOURNAMENT				

TECHNICAL SET UP - BWF WORLD TOUR SUPER 300

MINIMUM 8 CAMERAS

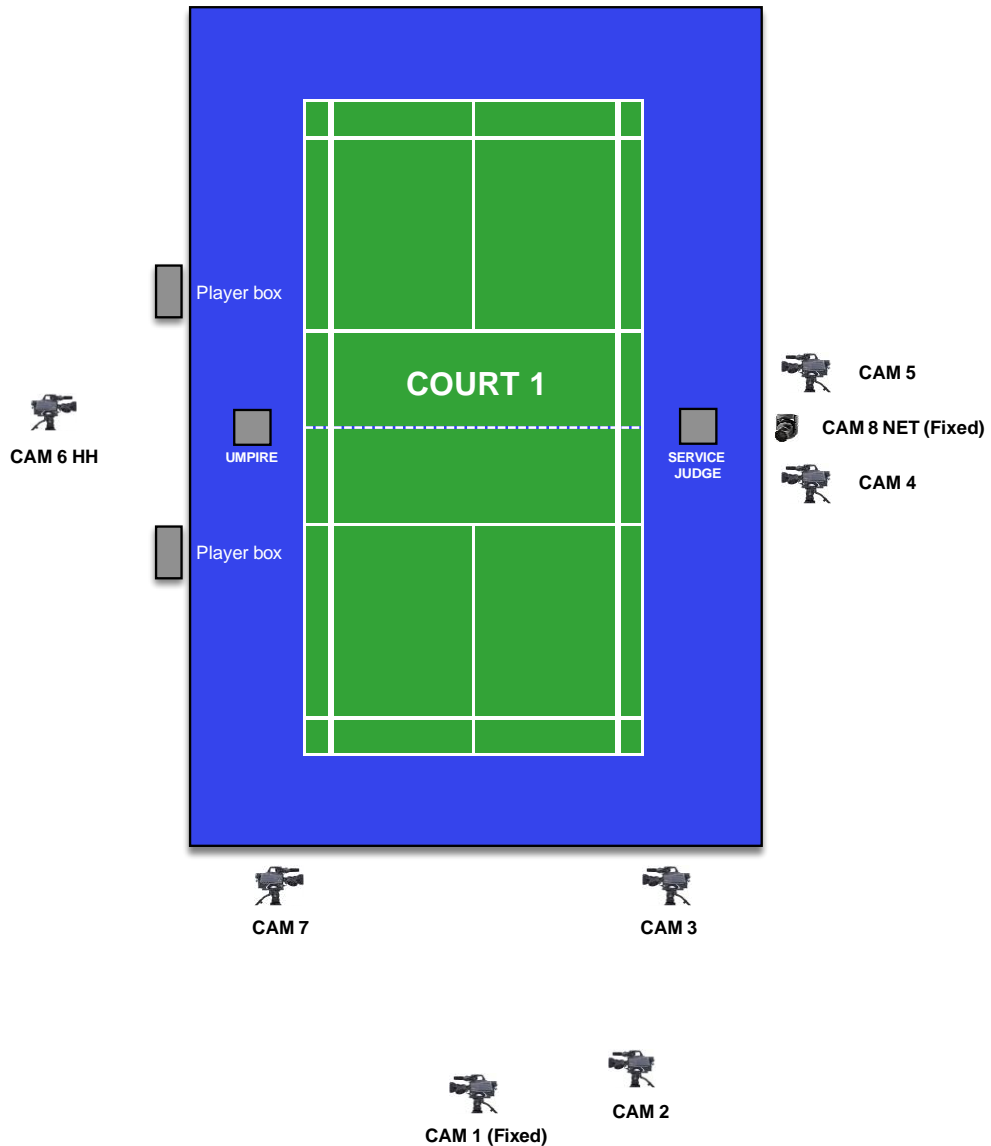
BWF WORLD TOUR (SUPER 300) 2023 - 2026					
DAY	STAGE	COURT 1	MATCHES	COURT 2	MATCHES
DAY 1 (TUESDAY)	ROUND 32				
DAY 2 (WEDNESDAY)	ROUND 32				
DAY 3 (THURSDAY)	ROUND 16				
DAY 4 (FRIDAY)	QUARTERFINALS				
DAY 5 (SATURDAY)	SEMIFINALS	X	8		
DAY 6 (SUNDAY)	FINALS	X	5		
TOTAL	13 MATCHES PER TOURNAMENT				



HSBC BWF WORLD TOUR 2023-26 Camera Plan - General V1

CAM 9 Reverse not to be seen in master frame or block spectators

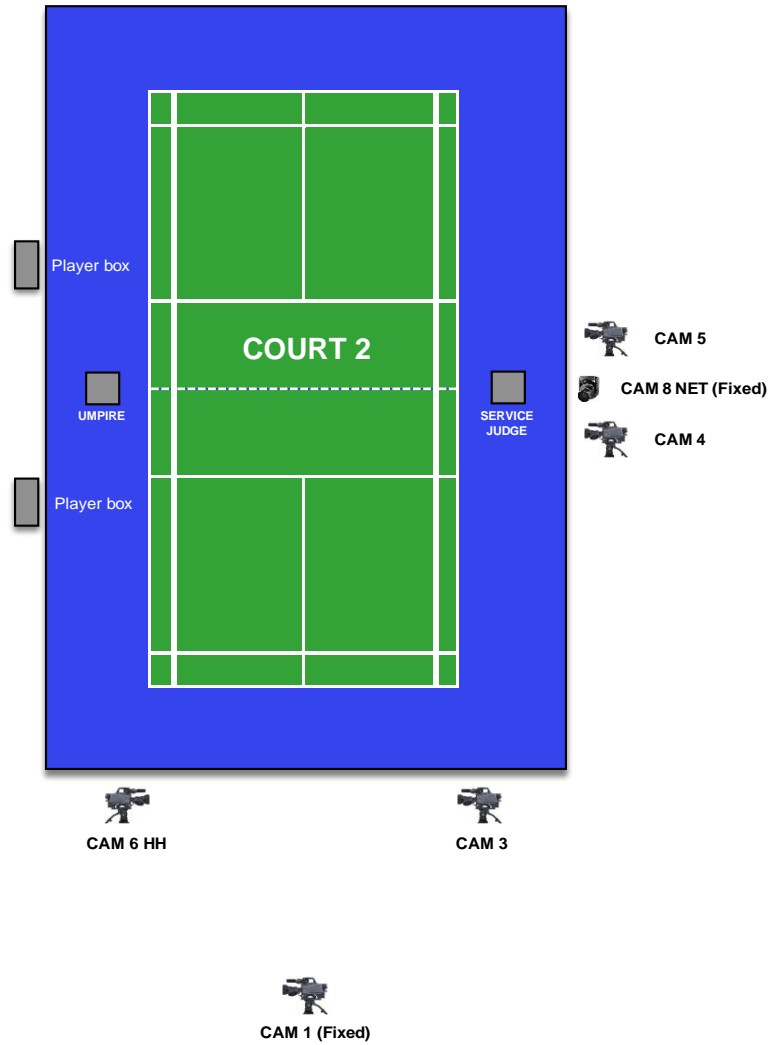
CAM 10 (Beauty shot)



PLEASE NOTE: All cameras to remain outside of A-board boundary except for Hand Held camera



CAM 10 (Beauty shot split from Court 1 if needed)



PLEASE NOTE: All cameras to remain outside of A-board boundary except for Hand Held camera

CAMERA SET UP - Description

1. Main Camera – (Fixed - Locked Off)
2. Mid/Tight Follow
3. Back Line Right
4. Side
5. Side
6. Hand Held (Roaming, Player boxes)
7. Back Line Left
8. Net (camera to be mounted behind A-boards and not on court side of A-boards)
9. Reverse (not to be seen in master frame shot)
10. Beauty

Camera	10 x camera coverage minimum:
Jib Camera	SF & F
EVS/LSM	Minimum - 2 x 6 Channel EVS/LSM Hard disc or similar with camera input router capable of selecting all 10 x Cameras
VTR1:	Master Record World Feed Feed in HD 1080/ 50i
VTR2:	Back up of Master Record
Graphics	BWF World Tour will have original OSGP <ol style="list-style-type: none"> 1. Opener/ Closer, Replay wipe 2. Main Camera 1 - Virtual Centre Court Logo, World Tour Composite and City name
Vision	Minimum 3 x ME Digital Switcher capable of executing replay wipe, Camera delays, Switcher capable of dual feed outputs for WF & Domestic graphics
Audio	Digital Audio mixer with a minimum of 24 x channels, audio delays <ol style="list-style-type: none"> 1. Audio delay capable 2. 2 x Wireless microphones for Umpires
Commentary	Fully equipped World Feed Commentary Position + Talkback Communication from OB to Commentary Position
Master Shot	This must be a locked off or fixed camera in order to facilitate the use of official BWF centre court virtual graphics. This main camera angle must be a fixed frame and not move during play.

TECHNICAL SET UP

- It is mandatory to have at least 1 Hand Held camera which can be placed on tripod and removed when mobility is needed. (included in camera plan above)
- We strongly suggest that Host Broadcasters allocate 2 x Super Slow Motion Cameras for at least the last two days of the event in order to capture isolated shots of players in action on court
- There are no upward limitations regarding the number of Cameras a Host Broadcaster wishes to deploy
- EVS disc-based replay system for replays
- Graphics capability enabling player and score statistics
(See Graphics section for requirements for on Graphics and Hawk-Eye IRS.)
- Vision Mixer with suitable Replay Device or RAM recorder capability for replay transitions supplied .tga sequence with embedded alpha channel
- Commentator positions for two (2) commentators including technical facilities and technical assistant - Per TV Court
- Commentary audio box for monitoring specific audio tracks
- Sufficient Audio Effects Microphones, Wireless Microphones for Umpires, Monitoring and Mixer.
- Suitable music insert device (no iPhones, iPods or continuous looping of music tracks)

7. HOST BROADCASTER PRODUCTION

The Host Broadcaster will need to provide the minimum crew:

- 1 x Director
- 1 x Producer
- 1 x AD (Assistant Director to count in & out the international commercial breaks)
- 1 x Engineer/Technical Producer
- 1 x Vision Mixer
- 1 x Audio Mixer
- 1 x English Speaking personnel for translation
- 3 x EVS (minimum) Replay Operators/Replay Producer
- 2 x CCU Operators
- 1 x Floor Manager
- 6 x Cameraman

MATCH DIRECTION

The key principle for the match directors is to remember that they are providing coverage and programming for a multilateral **WORLD** feed. It should therefore be unbiased and objective, in order to satisfy the viewing preferences of a global audience and not just a specific domestic market.

Match directors, producers and audio operators must listen to and follow the world feed commentary.

Badminton is a growing sport with new viewers joining the coverage all the time. Consideration must be given to producing both an exciting and informative program that satisfies the needs of sport aficionados and newcomers alike. Interesting and alternative camera angles can be used to offer a different perspective of the game or a more creative and artistic presentation of the sport and the field of play. These must not however detract from the comprehensive coverage of the live action play and analysis of replays.

Match directors and producers must also consider the following basic principles/guidelines for match direction:

- Coverage must be totally impartial, with equal emphasis on both players and doubles pairs, i.e. balanced coverage throughout the match.

It is important to show post match reactions from both players/pairs and not just a home favorite.

The guiding rule for coverage is keep things simple but exciting. Creative camera angles are encouraged if they do not detract from clear match coverage.

Live action when the shuttle is in play is always priority – action must not be missed. The issuing of warnings and umpire rulings such as line calls must be covered. All injuries and courtside action such as coach's interactions should be covered with fair coverage of both players and doubles teams.

Where possible, crowd shots should be shown frequently, when points are scored or a match won, with given to equal coverage of both groups of spectators during play and post match reactions.

Player close ups and related graphic information are very important in establishing the personality and status of the participants and should be used regularly.

More should be made of the celebrity and “hero” status of key Star players and top seeds. Directors should choose appropriate camera angles and shots to emphasize these points. Shooting from a lower angle during walk-ins, showing fan reactions and players in direct relation to or interacting with the crowds all add to the grandeur and drama of the event and its stars.

Use of venue exteriors and wide shots are important to give a sense of place for each unique BWF World Tour event. Where possible VT packages of the city, region or country can be included between matches to emphasize the current location of a particular BWF World Tour event.

No coverage of **unofficial banners or commercial signage** that is not part of the official event overlay and advertising layout should be included in the WORLD FEED.

SLOWMO/ REPLAY DIRECTION

Match Directors should consider the following replay philosophy during live match broadcasts:

- Priority is always given to the live coverage.
- No replay to be inserted when the shuttle is in play. Serves must not be missed.
- The BWF World Tour series graphic replay transition and or wipe must always be used.
- Replays are to only be inserted when relevant to the current live action or to illustrate a relevant skill or incident.
- The replay should be from the best and most appropriate angle available and used to better illustrate the action, point or incident. i.e., baseline Camera for line calls.
- The director should consider the analysis that the World Feed Commentators can give from a particular replay angle.
- Choose angles that give commentators an opportunity to better explain a particular point.
- Multiple angles of the same incident can be used if they better illustrate a point and time allows their inclusion.
- Use of player reactions to an incident is important but do not take priority over detailed analysis.
- Replay Operators and Replay directors should be encouraged to live cut their inputs and thus utilize all available camera angles.

AUDIO CONFIGURATION

The uplinks can transmit FOUR high quality audio signals simultaneously.

The Host Broadcaster must provide the international sound track in stereo.

If necessary, participating broadcasters need to make their own arrangements to convert to mono.

Audio channels 1 and 2 are BWF World Feed English commentary. The commentary tracks can be used as a guide or as main commentary on your network. However, the broadcast of these commentaries without written permission from Infront Pan-Asa is not permitted.

Audio channels 3 and 4 are dedicated to International Sound.

The Host Broadcaster is required to provide the following tracks to the Uplink:

Audio 1 – BWF World Feed English Commentary (Full mix stereo L)

Audio 2 – BWF World Feed English Commentary (Full mix stereo R)

Audio 3 – International Sound (M&E stereo L)

Audio 4 – International Sound (M&E stereo R)

Audio 5 – Director/Assistant Director Line for calling commercial breaks on World Feed

Audio 6 – Clean English Commentary

The Host broadcaster is expected to deliver an HD SDI Embedded signal (1080i/50 or as notified by the BWF) to a satellite specified by Infront Pan-Asia via a SNG truck or if agreed by Infront pan-Asia to the nearest International Satellite Gateway.

The Host Broadcaster is expected to make its own arrangements for the delivery of local language /domestic unilateral coverage commentary circuits.

END-TO-END TEST

In order to guarantee the quality of the transmission signals, the BWF requires Host Broadcasters to test all circuits from end-to-end with the BWF distribution partner **one day prior (24 Hours)** to the start of world feed coverage.

It is essential that the OB Vans and technical staff are made available for these tests to allow full testing of lines and satellite links using Color Bars, moving Camera pictures, World Feed graphics and 6 x audio channels.

8. HOST BROADCASTER TV MEETINGS

The Host Broadcaster must attend an initial Production meeting and venue tour no less than 1 month prior to start of the event. This applies to new venues and new engaged Host Broadcasters.

Subsequent meetings as follows:

- Pre-production meeting no later than 1-day prior to start of event coverage
- Onsite Briefing 2 hours before start of coverage/Debriefing 10 minutes after the end of each World Feed.

Duration

Initial Production meeting and venue tour schedules for 1 full day (8 hours)

Pre-production meeting:	2 hours max
Briefing before the match:	20 min
Debriefing:	10 min

Place

Meetings should take place in the venue (meeting room). The Local Organizing Committee (LOC) or Host Badminton Federation shall inform all participants about the meeting well in advance.

Meeting Participants

Attendance of all/ some of the following personnel should be available for all production meetings:

1. BWF Tournament Series Manager (leads the meeting)
2. Infront Pan-Asia LIVE Producer and/or Infront pan-Asia Broadcast Services Manager
3. Representative of the LOC Host Federation
4. LOC representative
5. HB TV Producer
6. HB TV Director
7. HB Technical Manager
8. IGNITE Graphics Producer
9. Hawk-Eye representative
10. Venue Management Team and Engineering Team

9. HOST BROADCASTER WORLD FEED REHEARSALS

The Host Broadcaster shall conduct Broadcast rehearsals at least **1 day** prior to “live” broadcast.

The Host Broadcaster shall conduct Broadcast rehearsals with commentary each day of live before satellite is up.

10. HOST BROADCASTER WORLD FEED DELIVERABLES

The HOST BROADCASTER shall deliver free access to the WORLD FEED television coverage (i.e., audio/visual) of the BWF World Tour (signal access **MUST** be supplied) including provision of the continuous live clean signal delivered to the nearest international gateway or on site as required by the BWF MEDIA PARTNER

The live clean signal must include **international sound and commentary** on separate tracks. Commentary is to be in English with a selection of commentators to be supplied by the BWF/ Infront Pan-Asia. The world feed commentary positions must be delivered **free of charge** to the BWF.

The television coverage shall be coverage of the TOURNAMENT suitable in all respects for International broadcast purposes and fully cleared for international exploitation.

11. VENUE SETUP

All Venues must have the minimum requirements as follows:

1. Power Supply
2. Camera Platforms
 - Minimum 6 x 3 Meters for Main Camera angle
 - Minimum 5 meters from centre of Baseline
 - Minimum 5 meters height from surface
 - Reverse camera platform high centre baseline, alternatively high 45 degrees to Court

Above dimensions are suggestions and may vary from event to event. HB and LOC are required to be flexible with regards to changes.
3. Commentary position according to BWF/ Infront Pan-Asia standards
4. Placed at centre of main stand directly behind the TV court baseline Large desk for equipment, laptops and notes
5. 2 x height adjustable comfortable chairs for two persons (commentators)
6. Depending on the local facilities – implementation of a TV studio
7. Parking area for the OB Van, OB tender truck, SNG Trucks and additional production vehicles as and where required.
8. Suitable venue office space for Executive Live Producer and Broadcast Services Manager with power and internet.
9. Executive Producer access to the venue at least 48 hours before coverage begins
10. Additional commentary positions as required by Broadcast Service

12. SATELLITE DISTRIBUTION

A company will be appointed by Infront Pan-Asia to assist with the administration and technical coordination of the signal transmissions relating to the coverage of the BWF World Tour events.

Infront Pan-Asia will provide the program coordination and signal distribution for all broadcasters. It will also support the necessary technical planning, co-ordination and delivery of signals for all broadcasters.

Infront Pan-Asia will provide a central bookings and information distribution service via its office in Singapore (Brian Lee, Broadcast Services Manager) for unilateral and production operations. Brian Lee will also be present at some BWF World Tour events to oversee and coordinate World Feed Satellite distribution, Unilateral Satellite and Production Services and all Host Broadcast Production Operations.

In addition, for all BWF World Tour events, Infront Pan-Asia will supply an Executive Producer to supervise all Host Broadcast Operations and World Feed Production on-site.

- **Brian Lee** | Broadcast Services Manager – brian.lee@infrontsports.com
- **John Adamson** | Executive Producer - Live - john.adamson@infrontsports.com

13. MATCH RECORDING

The Host Broadcaster must record the continuous PGM output for refeed/back-up purposes. This must include all WORLD FEED audio tracks.

14. MATCH SCHEDULING

The HOST BROADCASTER shall provide Court 1 and Court 2 TV Production (depending on Tournament level)

The broadcasters (both domestic and international) and the TOURNAMENT ORGANISER will be consulted in the scheduling process.

The schedule of matches on the main television court and on any secondary court will ultimately be the responsibility of the BWF. If there is any disagreement over the schedule of what constitutes 'best matches' on the main television court', the final decision will rest with the BWF.

15. GRAPHICS PARTNER (OSGP)

A graphics supplier (**AE-Live**) has been engaged to attend, produce and operate all World Feed match, score and statistic graphics using an approved Television Graphics Character Generator system.

The Infront Pan-Asia Executive Producer will also supervise the Host Broadcasters World Feed Production.

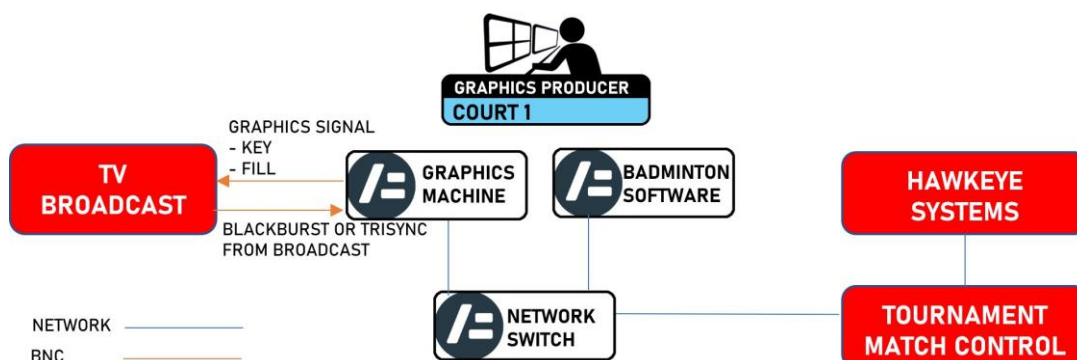
GRAPHICS SOFTWARE AND HARDWARE

The Graphics Scoring Equipment and personnel are supplied by Infront Pan-Asia and independent graphics company, AE-Live.

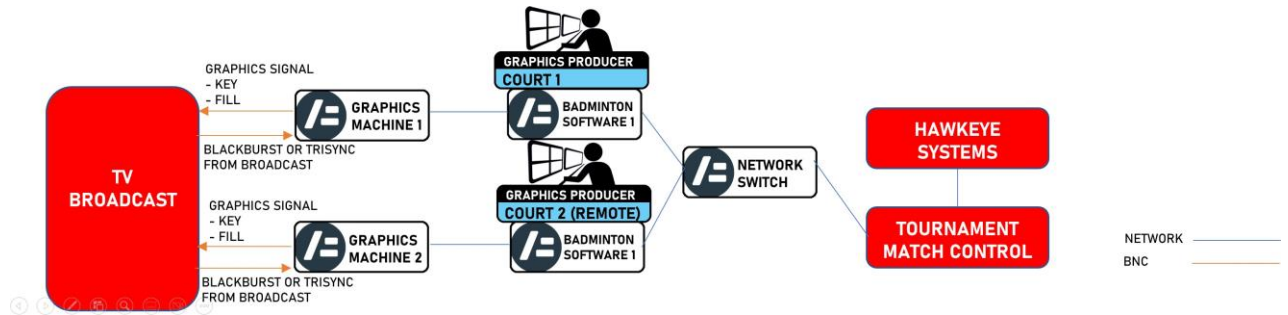
AE-Live operates specifically developed hardware and software that utilises **Tournament Software** Live Score data for the Television Graphics.

16. PRODUCTION AND ENGINEERING TECHNICAL INTEGRATION – AE-LIVE GRAPHICS

WORLD FEED GRAPHICS SYSTEMS DIAGRAM TV COURT 1 PRODUCTION



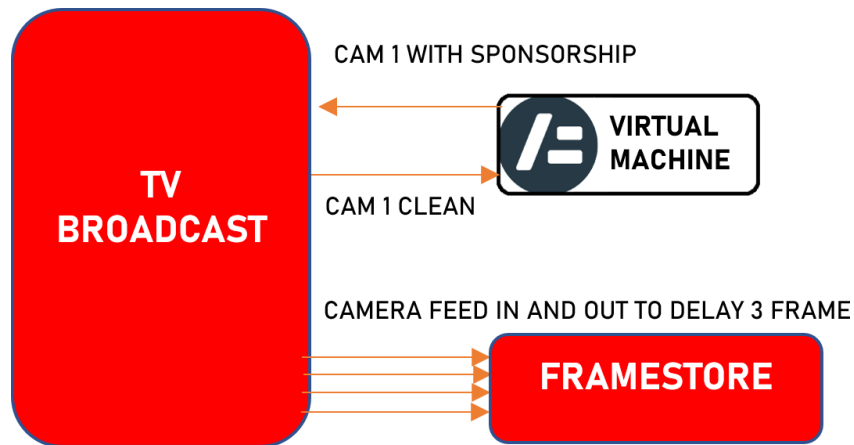
WORLD FEED GRAPHICS SYSTEMS DIAGRAM TV COURTS 1 & 2 PRODUCTION



Graphics Systems will require/offer the following signals to/from HOST BROADCASTER OB unit engineering set up to allow full integration and use in the world feed program production

TV COURT 1 PRODUCTION	TV COURT 2 PRODUCTION
1 x Graphics Preview HD Signal	1 x Graphics Preview HD Signal
1 x Reference (Black burst or Tri-sync)	1 x Reference (Black burst or Tri-sync)
1 x Graphics Fill HD Signal	1 x Graphics Fill HD Signal
1 x Graphics Key HD Signal	1 x Graphics Key HD Signal

MASTER-CAM VIRTUAL



Master Camera (Cam 1) with virtual processing has a 3 frame video delay on the output.

The Host Broadcaster will need to delay the additional cameras and audio onsite by 3 frames for live cut.

Please ensure the production has sufficient frame store capacity to adjust synchronization.

PRODUCTION AND ENGINEERING TECHNICAL INTEGRATION – AE-LIVE GRAPHICS – continued

As part of the technical integration, the HOST BROADCASTER must supply and rig all the following equipment as standard in the designated areas:

On-Screen Graphics Area (OB Unit or Control Room)

1. 2 x TV colour monitors (minimum 21 inch) with direct-cabled signal feed of the following
 - a. 1 x dirty feed with graphics
 - b. 1 x Quad split of
 - i. Graphics fill output
 - ii. Graphics Preview output
 - iii. Clean feed without graphics
 - iv. Virtual output (Cam 1 with virtual graphics)
2. Talk-back communications system to production control room, commentary, Hawk-Eye.
3. All necessary TV Video and audio cabling/connectivity
4. Cat 5/data cabling from match control area (Visual Reality Live Score network) to Graphics network hub.
5. Cat5/data cabling from Hawk-Eye to Match Control Area.
6. Talk-back communications system to HOST BROADCASTER OB unit or production control room and on-screen graphics producer.
7. All necessary TV video and audio cabling and connectivity

Graphics Work Area Space

Suitable space must be allocated in the HOST BROADCASTER OB Truck, production control room (at VENUE) or porta-cabins (if no space is available inside the venue) for 1 x Graphics Producer and 1 x Assistant. The space must be able to fit desk, chairs power supply and cabled internet service. Similarly, sufficient space in the same location must be allocated for the graphics generator equipment which consists of:

(Court 1 production)

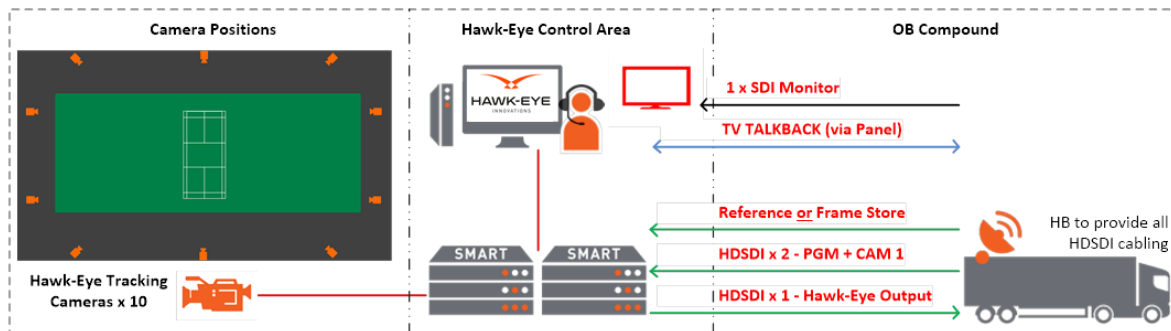
- 3 x Laptops and breakout boxes
- Cabling and power supply

(Court 2 production)

- 3 x Laptops and breakout boxes
- Cabling and power supply

32. PRODUCTION AND ENGINEERING TECHNICAL INTEGRATION – HAWK-EYE IRS

The HOST BROADCASTER and LOC is responsible for the full integration of the Hawk-Eye (IRS) and on screen graphics system into their production and engineering set-up at the VENUE.



The HOST Broadcaster’s senior OB engineer, unit manager or technical manager onsite, must plan, implement, and supervise this integration.

Full technical Integration includes but is not limited to:

1. Supplying and rigging all cabling and connectivity between the supplied systems and the HOST BROADCASTER’S OB unit or control room engineering system
2. Supplying and rigging all cabling and connectivity between the supplied systems and the match control *Tournament Software* live scoring system
3. Supplying and rigging suitable program monitoring in both Hawk-Eye and on screen graphics positions
4. Supplying and rigging all suitably grounded and secure uninterruptible power supply
5. Supplying and rigging all suitable “Talk Back” communication systems between both positions and the HOST BROADCASTER’S production and engineering areas (two-way radios are not sufficient)
6. Supplying and rigging a suitable replay transition device (**RTD**) or similar vision mixer desk RAM recorder system to allow for the full use of the OSGP replay transitions and wipe graphics
7. Technical support from OB engineering staff

33. PRODUCTION AND ENGINEERING TECHNICAL INTEGRATION – WORLD FEED COMMENTARY

The below are minimum requirements for commentary setup:

- 2.5 metre table with leg room - Minimum 2
- 2 x height adjustable chairs with back rest
- 2 x 4 electric power boards for commentator laptops, tablets, lamps
- 2 x Lip Mics
- 2 x reading lamps



- Commentary Box with mute buttons and independent levels control for Umpire microphone, Commentators microphones, international sound.



- 1 x CAT 5 Internet (1 commentator) / 2 x CAT 5 Internet (2 commentators)
- World Feed monitor for each commentator.
- 2 reading lights

Commentary Positions

Commentary positions for world feed and rights holders must be located with an excellent view of TV Court 1 and TV Court 2. Their locations has to be directly behind the TV courts and at the same end of the TV main camera. It is essential that there are no barriers in front of the table which may restrict commentator's line of sight. Position has to be secured from the public. Unimpeded access to and from the position is also required. Commentary positions for all client broadcasters must be provided with space, tables, chairs and power free of charge and all other services charged according to an agreed rate card.

PRODUCTION AND ENGINEERING TECHNICAL INTEGRATION – WORLD FEED COMMENTARY continued

COMMENTATOR BOX CONFIGURATION

- A. Commentator A clean voice
- B. Commentator B clean voice
- C. International sound (full mix, minus commentator voice)
- D. Umpire Microphone



19. OTHER CONSIDERATIONS

- The HOST BROADCASTER must ensure that all cabling, power supplies and equipment deployment meets all venue, local, international and BWF designated health and safety standards, is isolated from public areas and interference and is suitably covered or protected in any public areas, roads, car park or compound spaces on its route between the VENUE and the HOST BROADCASTER'S compound.
- The HOST BROADCASTER must ensure that all cabling and connectivity is fully operational, well maintained and a suitably high quality (running additional back up cabling should be considered to offer full redundancy in the system).
- All items listed above including equipment, services, integration and power must be supplied free of charge.
- Facilities such as rooms, chairs, tables and other such inventory cannot be charged as part of the rate card and must be delivered free of charge for the BWF and onsite Infront Pan-Asia's production team.

20. ADDITIONAL HOST BROADCASTER SERVICES & CONSIDERATIONS

Rate Card

Infront Pan-Asia will publish a Rate Card of facilities for BWF and Infront Pan-Asia and its broadcasters, to be agreed in consultation with BWF and Infront Pan-Asia and the BWF media partners.

Tournament Media Rights

All facilities reasonably necessary to allow for the exploitation of the TOURNAMENT MEDIA RIGHTS by international client BROADCASTERS at the site of the tournament, including but not limited to: unilateral camera for in- vision presentation, editing facilities, ENG cameras, play out facilities, match recording facilities, commentary positions to full technical specifications for two commentators and observer positions, work spaces/ mini studios, including phone/fax line and Internet connection etc, with the understanding that any such international BROADCASTER will be charged no more than published, current rate prices for the use of such facilities and personnel.

Onsite Content Feed

BWF and Infront Pan-Asia will be given, at no additional reasonable and timely access to such on-site facilities necessary to allow it or its licensee to play out daily feeds produced by the HOST BROADCASTER. Access to facilities to produce additional daily content feeds shall also be given.

Communication

The HOST BROADCASTER must also provide a “Talk Back” communication system that will allow for easy communication between the Executive Producer, Graphics, Commentary, Hawk-Eye, HB OB truck/PCR.

Facilities such as rooms, chairs, tables and other such inventory cannot be charged as part of the rate card and must be delivered free of charge for the BWF and onsite Infront Pan-Asia’s production team.

Add On Equipment

HOST BROADCASTER must provide and facilitate the inclusion into the HOST BROADCASTER OB set up of any additional or "add on" equipment required by BWF and Infront Pan-Asia for the production and delivery of the continuous Live Clean Signal for its International Broadcasters. This can include but is not limited to Commentary Position for World Feed Commentary, Graphics Generation, Hawk-Eye IRS and all associated interface and cabling for connection to Tournament Information and Statistics services. BWF or its licensee will agree upon any such additions in advance.

Power

The Host Broadcaster is responsible for ensuring that all power provisions at the TV compound are fully redundant and sufficient to guarantee uninterrupted TV production of the international World Feed.

They are also responsible for providing free of charge any such power as required by DSNG Uplinks and Vehicles needed for the transmission of the World Feed signal.

Cabling

The Host Broadcaster in conjunction with the Local Organizers is responsible for installing all Televisions and associated power cables safely and securely.

Where necessary they should provide the necessary equipment (cable trays, bridges etc) Cabling will be inspected prior to the event and is subject to improvement if deemed necessary by the BWF and its Media Partners.

21. WEB STREAMING SETUP

- Infront in conjunction with the BWF has arranged for web streaming of selected courts at each BWF World Tour event (World Tour Finals to Super 100's). This streaming will start from the first day of the tournament and continue until and including the Finals.
- The Host organizers and Host broadcaster must assist in the facilitation and delivery of this service.
- The Infront streaming partner will require a main control area to monitor the World feed production, Statistics and Scoring graphics (at BWF World Tour events).
- Sufficient space must be made available FOC to accommodate this set up.
- 3-4 small digital video cameras will be deployed for the Streaming coverage.
- The Host organizer must provide suitable camera positions or platforms for the use of these streaming cameras.
- These positions should be provided for each and every court in the venue and offer a clear and uninterrupted view of the game play from behind the Baseline.
- The positions must be clearly identified and marshalled to ensure they are not used by the public or other non-authorized personnel.
- The camera platforms MUST be positioned on the same side as the main Host broadcaster TV cameras.
- The streaming service needs to get direct access to the Umpires microphones either via the venue Audio PA system or directly from the Umpires Chair itself.
- The Host organizer in consultation with the Host broadcaster must assist in providing suitable audio cabling from the Umpires chair to the Streaming control.
- A dedicated Static Public IP internet line of no less than 25 Mbps Upload/Download per court at a total of 100Mbps must be provided in the streaming control position.

22. MEDIA PRINCIPLES

The BWF has established certain key principles for the protection of the game and its associated media rights. BWF will cooperate with broadcasters to ensure their understanding of these principles.

Respect of the field of play

All media personnel and equipment must be positioned in such a way that they do not hinder or present any danger to players or officials.

Cameras should be away from sidelines and positioned behind advertising boards.

All courtside fixed cameras must also have adequate protective covering to ensure safety to players.

The field of play itself must always be kept free of cameras, cables and media personnel except for pre and post match introductions and celebrations.

Respect of officials

Broadcast equipment and personnel must not obstruct the view or movement of, or cause confusion for match officials, players or coaches.

Respect of Spectators

All broadcast operations should not cause obstruction to spectators' view of the field of play (excluding confirmed Camera, Commentary and Data positions). Cameras should not record the crowd in a manner, which could cause any dangerous activity

Respect of players/coaches

Broadcasters must respect the needs of the players and coaches. Interviews may be arranged only in areas defined and approved by the BWF and Infront Pan-Asia Live Executive Producer. Reporters must not approach players or coaches for interviews or comments during play.

Respect for other Media

All media representatives must respect the needs of other media colleagues. Broadcaster technical personnel or photographers must not disturb media working areas during the match.

23. PRIZE PRESENTATIONS & PRIZE PRESENTATION PROTOCOL

The presentation for each BWF World Tour series events should follow immediately at the end of each event final.

They should be planned so they are made as quickly and smoothly as possible and they should always be rehearsed. Infront Pan- Asia and host broadcaster shall be consulted with regard to the presentation in order to make it as broadcast-friendly as possible.

All Presentations must be covered by the Host Broadcaster and a running order will be supplied by BWF to Infront Pan-Asia

All presentations must be set up so cameras have unhindered access view to players on the prize podium and presenters must not stand in front of cameras.

A prize presentation rehearsal will be required at least one day before actual event. Rehearsals will be conducted as many times as required.