

BROADCASTERS' MANUAL

GENERAL

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Use of the Manual

As the international organisation responsible for the promotion and development of skiing, FIS is constantly looking to find new ways of increasing interest in all of the FIS disciplines.

The starting point in this endeavour is to ensure that the events in the FIS calendar are organised to the highest level by granting the responsibility to Organising Committees which understand the sport and are willing to invest in creating the best environment for athletes, officials, media, sponsors and spectators. The guarantee of high quality events involving the best athletes competing in the most attractive environment is an essential platform for coverage through the electronic media, which is the means to reach and attract the largest number of people.

This manual offers carefully prepared guidelines for both Organising Committees and Host Broadcasters to ensure the delivery of exceptional and consistent standards of television production throughout the calendar season. The manual is intended to provide the parties with the best possible platform to launch the necessary planning and final delivery of first class skiing events for the international television audience.

In the preparation and planning of events in the different disciplines there are a large number of common elements. For this reason, the manual has been designed with a number of sections. In the first section of the manual general information and explanations affecting all disciplines are provided, elaborating the vital planning phases of any given event, while outlining the division of responsibilities between all contributing parties. Where possible photo examples, drawings and illustrations have been added to complement the text and many examples have been included that broadcasters are advised to follow.

This core text is supplemented by appendices relating to the individual FIS disciplines. These include the competitions and their formats, coverage philosophy, production planning, television running orders, on-screen graphics with timing and data presentation, examples of venue layouts, camera plans and broadcast installations.

This manual is intended to be a portable and quick reference publication that accompanies skiing production of the different disciplines both in the development stages and during the competition phase of the event.

It is recognised that the world of sport and electronic media is constantly changing, and regular updates and modifications to this document can be expected, as required by the individual discipline and technological developments

This Broadcast Manual was produced jointly by FIS and Infront.

Should you have any questions about the use of this manual please contact the persons given in the discipline specific annexes:

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1. Objectives

1.1 Role of Television

Television is an essential publicity tool for competitive sports competition and is a vital component of the marketing concept. The Host Broadcaster (HB) is responsible for the delivery of a high quality international television broadcast in close partnership with the Organising Committee (OC) and the International Ski Federation (FIS). The appointed FIS TV Supervisor will aid and assist the planning process and support the delivery of the production plan.

FIS Broadcast partners who have purchased the TV and/or media rights to FIS events are identified in this manual as Rights Holding Broadcasters (RHB's).

As a general rule, FIS aims to present a clear and concise division of responsibility with regard to the successful broadcast of a FIS World Cup or World Championship competition. The OC or the National Ski Association (NSA) of the host country will deliver the competition, including providing much of the physical infrastructure that will benefit both the HB and attending RHB's.

Perhaps the single most important objective for all HB's is to deliver a consistent and high level standard of production across all competitions throughout all participating host nations during the calendar season. The FIS presents simple guidelines for Host Broadcasters to follow which can be summarised as follows:

- Deliver a live complete and continuous High Definition international world feed to attending and non-attending RHB's, with opening titles, a complete graphics service (provided by FIS data and timing partner), international stereo sound and closing animation. A written and prepared format will be followed for pre and post-race programming including specific procedures for the podium ceremony and post-race formalities. The running order will include information on the venue and the sporting arena, be it an alpine, cross country, freestyle or snowboard course, or the profile of a jumping hill. The final phase of the running order will include an animation that informs the viewer of the next competition venue on the FIS World Cup calendar for the discipline
- The HB will produce the events in an unbiased and professional manner
- Offer the television audience exceptional coverage of the action that is likely to appeal to existing fans and stimulate growth in emerging markets
- Follow the drama inherent in the competition by using a variety of camera techniques, including appropriate use of replays and slow motion together with an exciting audio experience
- Offer modern and innovative enhancements and speciality camera devices that will complement the overall viewing experience
- Include post-race formalities as a high priority in the coverage plan including athletes reactions, the flower ceremony and athlete interviews featured in the multilateral feed
- RHB's are encouraged to customise their programming by attending the event and sharing the space and infrastructure in the TV Compound. The appointed Host Broadcasters are expected to liaise and support the needs of visiting broadcasters.

The importance of 'insightful, informed and editorially credible storytelling through appropriate shot selection and replay options' remain a key priority for all host broadcasters. HB's must follow the examples of the multilateral running order for the different competitions provided in the relevant annex to this manual.

The preparation and delivery of the production plan must be regarded as the most demanding of challenges, but equally the HB must also provide support services to unilateral broadcasters, TV Compound logistics, cabling, broadcast management and technical assistance.

Facilities may include the supply and installation of the commentary booth equipment, tailboard connection from the Outside Broadcast van to unilateral broadcasters' facilities and perhaps the supply of broadcast facilities to an attending rights holder.

The OC will be responsible for the supply and installation of the necessary cables to interface with FIS' data and timing service partner, although typically the Host Broadcaster will assist with this task, providing that the distances are reasonable and within the confines of the TV compound. The site survey will seek a suitable and convenient position for the Data and Timing Partner's technical facilities.

HB's and RHB's are invited to develop suitable production ideas that best illustrate the competition dynamic, capture the athletes' experience and offer performance comparisons in a way that will inform and appeal to both fans and new audiences.

The designated TV Compound should be designed and prepared well in advance of the competition with respect to occupation by both the host broadcast operation and unilateral broadcasters. These obligations may vary on a case-by-case basis and specific guidelines for each race venue will be made available to the respective HB and the OC.

Host Broadcasters are expected to design a suitable time frame in advance of each competition to fully prepare their broadcast installation. The schedule should consider the possibility of conducting a full technical and production rehearsal (with timing and a podium presentation) at least one day before the actual competition.

The organisation of the technical and production rehearsal will be carefully planned with the Organising Committee.

1.2 Principle points of contact and Division of Obligations

In order to successfully host and deliver a FIS World Cup Skiing event, the FIS works closely with the local Organising Committee and the National Skiing Association (NSA) who will introduce key members of their planning and event delivery team months in advance of each competition. In summary FIS contact with the key members of the Organising Committee, NSA and the appointed host broadcaster can be presented as follows:

Organising Committee / NSA	FIS Representatives
President Organising Committee and General Secretary	FIS Race Director
OC Appointed Host Broadcaster	FIS Event Coordinator
OC Principal HB Contact Media Centre	FIS Media and PR Coordinator
Chief of Stadium/Track	FIS TV Supervisor
Chief of Ceremony	Appointed Media Agent – TV and Media Rights Manager (TVM)
Timing and Data service	Appointed Data and Timing Services Provider
Logistics Contacts (accreditation, transport and accommodation)	FIS Technical Delegate

DIVISION OF OBLIGATIONS TABLE

	FIS	FIS TV Supervisor	National Skiing Association (NSA)	Local Organising Committee (OC)	Host Broadcaster (HB)	NSA / LOC Commercial Partner
Definition	<p>The federation is the main international organisation of ski sports and has a membership of 115 National Ski Associations. It is responsible for organising the calendar for competitions in all disciplines including the different FIS World Ski Championships every two years.</p> <p>The FIS also controls competitive ski racing by enforcing a set of rules which prevents any skier from having an advantage over another.</p>	<p>The FIS TV Supervisor (TVS) is responsible for monitoring the standard of TV Production and consistency from all participating venues throughout the calendar season.</p> <p>The TVS will assist host broadcasters with the necessary planning, development and documentation of their event and be associated to the project from the planning stage through to the final transmission days.</p>	<p>Is the national governing body for all skiing disciplines, providing direction and leadership for athletes from member clubs. The NSA is responsible for all aspects of competitive skiing from grassroots programmes through to the training and selection of the national team.</p> <p>Each NSA is responsible for planning and delivering competitive ski races as part of the annual commitment to the seasonal FIS calendar.</p>	<p>Each NSA will appoint a local organising committee to plan, build and manage the infrastructure required to deliver a major international skiing competition.</p> <p>The OC is expected to nominate a suitable contact for the benefit of the Host Broadcaster.</p> <p>This contact will aid and assist the HB's planning and installation of broadcast equipment at the competition venue</p>	<p>Is the appointed local or national broadcasting organisation that is responsible for the television production of the event. This may also be an independent television production company.</p> <p>The host broadcaster's coverage is produced and formatted in a way that accommodates the international broadcast rights holder, i.e. the video signal does not feature any in vision presentation and the audio signal is available as a clean effects mix only.</p>	<p>For selected events in the FIS calendar, the commercial partner represents the NSA and/or LOC by managing the domestic and international media and marketing rights. A designated TV and Media Rights Manager will attend each event (TVM)</p>
TV Planning Survey	<p>The FIS Chief race director is the most senior official at any FIS event and will attend the venue planning surveys.</p>	<p>The TVS will make a vital contribution to the panning survey, providing advice and guidelines regarding camera positioning, timing and measurement locations and the overall broadcast infrastructure.</p>		<p>A representative of the LOC should attend the TV planning surveys and note the necessary transport infrastructure required to support the rigging and installation process. Working closely with the HB and the FIS Race director, all aspects of the competition site are determined including the position of the start and finish areas, timing and measurement points, commentary tribune, timing room, mixed zone, TV compound, and all associated offices.</p>	<p>The TV producer, director and senior crew representatives, together with the FIS Staff, FIS TV Supervisor and a representative(s) from the OC will conduct a TV planning survey. The HB will produce a report documenting the results of the survey and submit to all attending parties. Designated camera positions and scaffold towers will require the approval of the FIS Race director.</p>	<p>The TVM will ensure that the documentation that is produced following the survey accommodates the needs of attending commentary teams and rights holding broadcasters.</p>
Safety	<p>The FIS Race director will examine all relevant safety requirements including camera towers and positions around the course.</p>	<p>The TVS will assist the FIS Staff by ensuring all broadcast devices, facilities, apparatus and cable installations meet the necessary health and safety standards as defined by each host nation.</p>		<p>The OC must deliver a competition site that respects the safety of athletes, staff and spectators.</p>	<p>The HB is expected to deliver a production plan which meets relevant FIS Safety guidelines, as well as their own safety procedures on the competition venue and within the TV compound. In certain nations the HB must be prepared to submit their risk assessment report.</p>	<p>The appointed commercial partner responsible for course advertising sales must respect the safety guidelines regarding advertising stands and inflatables.</p>
Broadcast Installation		<p>The TVS will ensure that the relevant documentation has been produced and distributed in order to coordinate and implement the broadcast installation according to an agreed timeframe.</p>		<p>Provides the necessary access to the camera and microphone positions including the use of snowmobiles, as well as supplying a safe and reliable technical power supply for the host broadcaster and attending RHB's.</p> <p>The OC must be responsible for the supply and installation of cable bridges, conduits, ducts and cable paths for the benefit of a safe and discreet cable installation.</p>	<p>The host broadcaster supplies as part of its agreement protective winter clothing for all crew and personnel including skis, boots and gloves.</p> <p>The host broadcaster will be responsible for the safe and discreet installation of cables within the confines of the TV compound including the use of cable ties and yellow jackets.</p>	<p>The position of advertising banners and stands corresponds to the intended camera plan.</p>

	FIS	FIS TV Supervisor	National Skiing Association (NSA)	Local Organising Committee (LOC)	Host Broadcaster (HB)	NSA / LOC Commercial Partner
Mixed zone	The FIS nominates a TV liaison coordinator to manage the mixed zone. In some cases this will involve a number of staff.	The TVS will assist host broadcasters with the planning, coordination and management of the mixed zone		Supplies and installs the action area, mixed zone podium position and necessary daylight colour temperature lighting. Also provides all of the necessary supplementary access devices to operate within the Mixed Zone.	The HB provides a bookable cabled camera unit with operator as part of its installation in the mixed zone for use by attending rights holders.	Depending on the contractual situation, the commercial partner administers the booking requests for pre-and post-unilateral services.
Logistics/space	.	The TVS will assist the host broadcaster in establishing the specific requirements for RHB's, including Commentary Booths. The FIS Production Guidelines indicate the minimum physical requirements and the data and timing service provider will supply a data feed monitor free of charge to each commentary booth.		Provides the necessary space for the TV compound operation mixed zone, commentary tribune, timing room and TV studios including security during the competitions phase of the event. The LOC shall also provide the necessary number of furnished and heated commentary booths for unilateral broadcasters to rent. In some cases both the physical booths and facilities within them may be supplied by the commercial partner.	The HB must provide accurate drawings of the TV compound space with relevant dimensions of each vehicle (including expanding sides). Regarding commentary booths the HB or commercial partner will be invited to supply the necessary number of equipped or partially equipped commentary booths with a duty technician available during the competitions phase of the event.	The HB or commercial partner will be invited to supply the necessary number of equipped or partially equipped commentary booths with a duty technician available during the competition phase of the event.
Data and timing	The FIS will appoint a data and timing service provider to supply the FIS TV graphics presentation in the English language for the international feed.	The TVS will provide relevant information to the HB		The LOC will provide a data and timing room for use by service provider including necessary lighting, furniture and protected power supply.	The HB will install the necessary cables, sync reference and programme monitor to the service provider according to a documented request.	
Broadcast Signal Uplink	The FIS shall update the host broadcaster and the commercial partner regarding any likely changes to the competition schedule due to poor weather or unexpected delay.	The TVS will assist the HB in establishing the final timings and satellite requirements including those for pre-and post unilaterals.		The LOC shall ensure a suitable position is available for uplink facilities, identified at the site survey.	The host broadcaster shall supply and install the necessary cabling to connect the international programme output to the uplink facilities.	The commercial partner is responsible for the supply and management of the International signal distribution, including all updates.

NB: The FIS TV Supervisor works under the guidance and authority of the Race Director responsible for each discipline.

1.3 Broadcast Planning Survey

For host locations that are established and existing competition venues, a planning meeting must be conducted in good time in advance of the event, with the FIS staff together with the assigned FIS TV Supervisor, the responsible TV Director and TV Producer of the HB (and members of their production team) and a representative of the marketing partner as appropriate. Representatives of the OC are expected to host the survey and may invite an advertising agent who has been appointed to sell available advertising space.

Each person contributing to the survey should not underestimate the time required to inspect the venue and assess the range of television requirements. Depending on the discipline, the survey will also identify the crucial points along the course and at the venue that will influence the television production.

For cross country, ski cross and snowboard cross competitions the actual design and selection of the course may be influenced by the television director, and certainly this is the case for new course designs so they can be best arranged for the aesthetic and logistical demands of the television coverage plan.

Each event may include a programme of competitions scheduled to take place over a number of days. The planning survey must consider any possible reset times between course lengths and race disciplines. In some cases, camera re-positioning may need to take place during the race itself and the additional cable paths and access logistics must be considered during the planning survey.

In summary FIS recognises the role of both TV Producer/Editor and Director to be defined as follows:

TV PRODUCER/PROGRAMME EDITOR JOB DESCRIPTION

- Overall operational responsibility for the Host Broadcaster's Multilateral Feed, in particular observing the 'story telling' requirements for any given race
- First and principal point of contact for all activities relating to the host broadcaster, including accommodating the needs of unilateral broadcasters, and facility requests
- Senior Operational Partner of the FIS Race Director/OC/Marketing Agencies
- Content handling of timing data and graphics
- TV Operational Consultant for all departmental supervisors

TV DIRECTOR JOB DESCRIPTION

- Delivering a programme that faithfully represents the producer's editorial decisions
- Positioning, handling and directing all broadcast devices on the course
- Directing and delivering the multilateral feed according to documented guidelines

In some cases, the TV Producer and Director may choose to attend an initial survey alone (say the day before the main survey with a member of the OC) to fully establish his/her initial production plan without the opinions of a large survey team.

A key principle for the TV Director and FIS Race Director is to remember they are providing multilateral feed coverage and this should be unbiased in order to satisfy the international viewing audience. Coverage should be impartial, with equal emphasis on all participants, including replays of their reactions. Live action should always be a priority, and quite often the best approach is to 'keep things simple'. At the same time, one of the most important assets of the designated TV Director and TV Producer will normally be considerable knowledge of the sport. This knowledge will significantly contribute to how the excitement of the competition can be captured, showing all the important parts of the venue and the development of the competition.

The HB Producer and Director are expected to study the form and performance of the athletes participating in the competition. Familiarity not only with the subject, but also with the season performance is imperative to fully understand and exploit the strengths and weaknesses of athletes in the coverage plan. This type of research may include recent recovery from injury, a change in tactical approach or the rising form of a new athlete whose style is eye catching and entertaining. This knowledge will aid the necessary preparation for the members of the production team who can be given specific instructions to identify particular athletes.

The technical purpose of the survey is to develop the camera plan, microphone positions and cable path routing. The survey also presents the best opportunity to identify the TV Compound layout, space to meet the unilateral facility requirements of RHB's, accreditation and access. The race dynamics can be discussed in terms of the competition venue layout as well as the position and operation of the Mixed Zone, podium, lighting considerations, commentary booths, data and timing service provider and all associated logistics such as power supply, parking, catering and security.

In summary and as a minimum requirement the HB is expected to nominate the following individuals to attend the survey:

- TV Producer/Senior Project Manager
- TV Director
- Chief Technical Manager/Technical Producer

Depending on the venue and the event to be produced the following specialists may also attend the survey:

- Senior Cameraman (also cable rig supervisor)
- Production Manager
- Audio Supervisor
- RF Engineer
- Lighting Supervisor (Night races only)

It is essential that each member of the survey team can make confident and clear decisions that will affect the planning and execution of the broadcast product. Things may and will change so it is vital that the survey report as the basis for all planning is detailed, factual and concise.

Another important purpose of the TV planning survey is to establish the position of the Mixed Zone and podium position beside the Finish Area. FIS will provide a Media and PR Manager and with the appointed TVM will manage the Mixed Zone and follow the guidelines and schedule determined for pre and post-race procedures.

The FIS Race Director and Event Coordinator must be invited to the official planning survey or at the very least receive the site survey report documentation following the inspection. For new venues a FIS appointed Homologation Inspector will attend in order to approve the strict standards required to host a FIS Skiing competition.

Following each survey the HB is expected to distribute a detailed camera plan (indicating how each camera will be used) and a schedule detailing the activities during the final days of preparation before the event. The OC will distribute plans of the competition site including the competition offices, TV Compound, mixed zone, podium position, commentary positions and all the logistical considerations such as parking, catering and team facilities.

TV planning surveys for new competition venue locations will require a more detailed and strategic planning approach in order to examine carefully the physical attributes of the venue and identify any special construction needs, safety considerations, access and consideration of the likely TV production plan. An experienced TV Producer/Director can provide a vital contribution to the design and layout of all new competition venues.

An example of the site survey considerations are summarised below:

Description	Action Required
<p><u>Venue(s) Infrastructure</u> with the OC, FIS Staff and HB TV Producer</p> <p><u>Camera Positions</u> carefully considered with respect to the way the story of the competition is to be told</p> <p>Air fences and protection of camera platforms to be provided by LOC</p> <p><u>Flash Interview position with backdrop and lighting</u></p> <p><u>Scaffold towers or Platforms</u> The likely position and height of towers or platforms with respect to the competition and expected weather conditions</p>	<p>The OC will initially provide the venue drawings and prepare a profile which may be included in the camera plans</p> <p>Following the survey the HB will distribute the camera plan drawings of the competition venue to include microphone positions and all timing points.</p> <p>HB to identify locations and determine level of protection required</p> <p>To be agreed with the HB</p> <p>To be agreed with the HB</p>
<p><u>Strategic Features</u> Define the locations of any specific features to be included in the coverage</p>	<p>As discussed with FIS Staff, FIS TV Supervisor and the HB to ensure suitable coverage is provided at strategic parts of the competition venue.</p>
<p><u>Finish Area</u> Define the finish line position and identify the relevant zones around the finish line, including the mixed zone and podium position</p> <p><u>Venue Public Address System</u> The PA system should not interfere with the international programme audio and the reporting/broadcasting activities taking place in the mixed zone or in the commentary booths.</p>	<p>The OC to distribute a map of the mixed zone area showing all of the different areas related to sporting and media activity depending on the discipline.</p> <p>The placing of loudspeakers to be coordinated with the HB</p>
<p><u>Race Leader's Position/Throne</u> Where used, identify the space for the leader position and/or the throne</p>	<p>HB to include a hand held camera in coverage plan for this feature</p>
<p><u>TV Compound Location</u> Establish a suitable space (as close as possible to the stadium area) and identify the most suitable position for satellite uplink vehicles Particular attention to the arrivals and parking schedule must be noted</p>	<p>HB to design and distribute a TV Compound layout including the positions of any unilateral rights holders, tender trucks and uplink vehicles</p>

Description	Action Required
<p><u>Cable Paths</u> Around competition venue and within the TV Compound</p>	<p>The HB will study the likely cable path runs around the competition venue and the delivery of cables in and out of the TV compound. A cable bridge may be necessary. In some cases the HB will submit a cable schedule so all known cable runs are identified. The HB must be informed in advance of the likely competition training times to avoid any scheduling conflict with the broadcast installation</p>
<p><u>Power Supply Requirements</u> Both technical and backup power supply requirements will need to be identified</p>	<p>HB to formally request a technical power supply specification for the OB and the domestic production vehicles, while the TVM will manage and co-ordinate requests for attending RHB's</p>
<p><u>Commentary Booth Positions</u> If permanent commentary booths are not available, FIS's appointed media agent may supply according to a specific agreement with the OC and demand from RHB's</p>	<p>OC to identify expected positions for commentary booths and the survey should check the sight lines as well as the supply of power, furniture, heating, telecommunications and suitable weather protection</p>
<p><u>Parking, Medical Services and Transport</u> Practical and Physical considerations</p>	<p>The survey should identify parking availability and the provision for medical services, public conveniences and media transport facilities</p>

1.4 Documentation Required Pre-Survey

The appointed host broadcaster expects to receive the venue and competition site drawings not later than two weeks in advance of the survey.

1.5 Documentation Following Survey

it is essential that there is a smooth and timely distribution of information between all contributing parties and each will make sure the following documents are delivered according to the timeframe specified below between the OC, FIS, TVM and the Host Broadcaster:

Host Broadcaster

- Master camera plan of the competition venue including scaffold towers and platforms, together with microphone positions to be delivered not more than 4 weeks after the survey
- Provisional TV compound layout may follow up to 10 days before the competition with the inclusion of attending RHB's and satellite uplink vehicles. The final version may be updated shortly before the competition itself
- Cable Schedule as required
- Daily Schedule for HB in terms of tender vehicle arrival, park and power, cable installation, skidoo availability, camera platform build, installation of all timing points, full rig and technical rehearsal. Note the training schedule should be provided to the Host Broadcaster as soon as it becomes available in order to coordinate the cable installation

Organising Committee/TVM

- Commentary booth plan with broadcaster divisions
- Start Area, Finish Area, Mixed Zone, including the divisions within the Mixed Zone

NB: Examples of these plans are included in the annex.

1.6 Media Agent Liaison with HB and Media Rights Holders

The media agent (TVM) shall act as the principal point of contact for all international TV and media rights requests associated with the competition. The TVM represents the International media rights for the event and is the only authority that may approve accreditation and other supplementary access requests from attending rights holders.

In particular, the TVM will handle all requests by RHB's who may wish to attend the competition including their logistical and practical needs such as accreditation, parking, security, local labour, accommodation and technical facilities. The TVM will coordinate specific requests for access and the use of ENG or unilateral cameras that may require operator bibs and authorisation stickers.

The TVM will also be the principal point of contact for non-attending RHB's in terms of signal delivery, coordination of feeds, pre and post unilaterals and the distribution of the daily running orders. In advance of each event the TVM will distribute the satellite coordinates to all international rights holders together with the necessary RAS or BISS codes and timing schedules, including line up periods.

Requests which specifically require action or co-ordination by the host broadcaster are communicated accordingly and the relevant documentation will be shared with the broadcast partner concerned. The host broadcaster will identify a suitable technical contact (as well as the producer or production manager) for the co-ordination and delivery of all HB related matters and facilities requests.

2. Television Production

2.1 General

TV agreements with a broadcasting organisation or Production Company must ensure that this Broadcast Manual is applied to ensure the production quality and TV transmission of FIS Skiing World Cup events included in the FIS calendar.

2.2 High Definition Technical Specification

All FIS events must be produced in High Definition in the technical standard of the country in which the event takes place.

2.3 Audio Specification

Audio line-up signals are defined as -18dbfs and must be produced as a stereo international pair. An international signal does not and will not include voice over or commentary in any language. Host Broadcasters may choose to produce an event using 5.1 Surround Sound providing a stereo international pair is available from the tailboard.

2.4 Satellite Uplink Specification and Distribution

The satellite uplink facilities provider is obliged to provide the necessary cabling from their SNG unit to the host broadcaster's tailboard. Typically the distance will be short and convenient, although approximate distances and parking positions will be defined during the site survey.

The specification is as follows:

- Two HD video cables with embedded international stereo FX, (A primary path and a backup)
- Specific instructions regarding the transmission modulation and schedule will be documented in good time in advance of the event.

2.5 Power supply

The LOC will be responsible for the installation of the necessary power supply, including UPS as agreed with HB, to ensure the production of the multilateral signal and meet the needs of UB's. The cost of electric power actually used and/or the fuel consumed for generators will be paid for by the HB and/or UB's.

3. Multilateral TV Production Considerations

3.1 Production Standards

FIS expects Host Broadcasters to offer exceptional standards of production for all winter sports events and aims to establish an excellent professional relationship with the appointed TV Producer /Project Manager.

TV coverage of FIS Skiing events should aim to capture the athletes' determination and competitiveness, the venue atmosphere, drama and human aspects of the event including the finish/win sequence and podium presentation. The overall graphics presentation for any Skiing event is crucial to aid the understanding of real time race activity and must not be underestimated. The following items are key values which FIS associates with high standards of production:

- A continuous live international broadcast formatted in a way that can be easily scheduled in a programming slot with opening titles, appropriate and relevant production before the competition start (according to a documented running order), the competition itself, results summary, flash interview, podium presentation and closing animation). The multilateral broadcast must not show any presenter in vision, or include inserts or commercial elements associated with the domestic broadcast
- As a rule, the international television feed should be self-explanatory as a viewing experience and not be dependent upon listening to a commentary
- The production will provide an uncompromisingly fair and impartial coverage of each competitor (with respect to the storytelling process and the format of the competition)
- Through appropriate shot selection and replay options, the viewer will be given an insightful, informed and credible account of the whole competition
- By sensible positioning and use of fixed, mobile and specialty cameras units the action and dynamic of the competition will be captured taking into account the limitations of the budget and available facilities
- Better understanding of the competition will be provided through a clear and informative graphics presentation giving accurate information in real-time
- Through the sophisticated use of experts working with a carefully prepared communication systems the story telling process for all disciplines will be assured
- Thoughtful and consistent coverage of podium ceremonies will be produced
- Adequate consideration will be given to the presence of advertising and event sponsors while respecting the course dynamics and natural landscape
- The live transmissions must include all FIS graphics related to each discipline, particularly the official FIS logo and replay wipe, start lists and competition results, live timing and scoring, as well as the overall event and World Cup standings

The discipline specific Production Plan and Coverage Philosophy is given as an annex.

The television viewing experience is greatly enhanced by correct and strategic positioning of microphones and it is important to select the appropriate positioning of directional microphones with windshield and woolly sock protection. In some cases, follow microphones might be required to capture the athlete's movement. Capturing sound from key points, depending on the discipline, such as the start and finish areas, the hill climbs, pit stops, coaching zones and spectator tribunes is an essential component of the television production.

3.2 Technical Infrastructure

The representatives of the HB are expected to arrive at the competition venue sufficiently in advance of the first transmission to ensure the technical set up for the event. During this time and according to a documented timetable, all relevant cable paths must be installed as well as camera platforms and any speciality camera systems including RF devices. The director will also confirm with the timing and data partner the exact placing of all timing and measurement positions so that the camera positioning is accurate around these points.

All safety requirements will be checked, including 'hidden' cables beneath the snow, the overall snow conditions and any possible course changes. Camera platforms and speciality camera units will be examined for their safety and view of the course.

The FIS Race Director will provide a final safety approval for camera platforms on the race course and in the competition area. The HB is expected to follow their own risk management procedures following documented guidelines in their individual event production manuals.

3.3 Cabling

Cabling is the responsibility of the HB and attending unilateral broadcasters, although the OC will prepare the necessary cable paths, conduits, ducts, tubes, bridges and safety elements for the cable installation in and around the competition venue itself. FIS insists the following guidelines are adhered to:

- Cables should not cause any obstruction or safety hazard to athletes, course officials, volunteers or spectators and must comply with local safety and security regulations
- Cables should not be laid over the advertising boards
- Every attempt must be made to ensure cables are installed discreetly and as unobtrusively as possible, particularly in the sensitive areas shown by the television cameras
- As and where necessary, cable bridges, cable ties, cable mats, yellow jackets and dressing should be used to make cables safe and secure
- The HB must provide assistance to visiting broadcasters to ensure their cabling needs are met
- The OC is responsible for installing the cables between the host broadcaster's production vehicle and the FIS data and timing service provider

3.4 TV Compound

Occupying a location identified during the site survey the TV Compound must be carefully managed by the HB, particularly with regard to parking and power supplies for all attending parties. The TV Compound should include adequate space for multilateral and unilateral production and SNG vehicles, tender trucks, a protected power supply, production offices, storage space and any temporary catering facilities.

HB's are responsible for producing a detailed parking plan of the TV Compound and should have a technical representative with decision making authority available when vehicles arrive, including those of attending unilateral broadcasters.

An uninterrupted power supply (UPS) must be provided to the HB and attending RHB's by the OC.

3.5 Lighting Installation

For events scheduled for evening/night races the complete competition area as well as the areas significant for the TV transmission must be lit with a minimum of 1000 lux measured at any point of the competition area in the direction of the main television cameras. In general, the competition area must be evenly lit with a constant colour temperature.

The course lighting must be supplied and installed by the OC under the supervision of the television production lighting supervisor. This matter can be discussed in further detail during the site survey.

3.6 Transition Replay Animation

The 25 frame FIS transition replay animation (wipe) will introduce slow-motion or super-slow-motion replays into the broadcast. The slow motion package should start and finish with a moving picture, not a freeze-frame. Within the package, the transmission from one slow motion to another should be a dissolve of 25 frames. Each replay sequence must be introduced by the FIS transition replay animation and relate only to the FIS Logo and the name 'FIS World Cup'. Any other branded replay elements are not allowed unless permission has been granted by the FIS. The same animation will carry these views off-screen to signal the return to live coverage. The animation will be accompanied by a 25 frame audio effect.

The transition replay animation will be supplied in advance by the TVM as a sequence of targa files or as a fill and matte animation supplied on videotape.

In the United States and Japan, the transition replay animation will run for 30 frames, according to the 525 line/60Hz system.

3.7 Use of Specialty Cameras and Handhelds

Typically handheld cabled or RF camera units, RF units on ski-doods, Jimmy Jibs, polecams, helicams, rail cameras and other speciality cameras will appear on the camera plan produced by the HB. The number and type of these speciality cameras will depend on the discipline and the production philosophy of the HB. A hand held RF camera may be the best choice to conduct the post-race flash interview featured in the multilateral feed.

Note that host broadcasters using rail cameras must supply to the Data and Timing Supervisor the frequency and power supply used to avoid any conflicts with timing equipment.

3.8 Record and Replay Devices

Host Broadcasting Organisations are expected to incorporate at least 2 X EVS video record and replay servers as part of their overall facilities inventory, one of which may be a Super Slow Motion server (SSM). Typically each competition can be followed by a short replay sequence of the highlights. The HB is also expected to make 2 x safety copies of the programme to Digital Videotape including a separate recording of any pre and post unilaterals. 3 x DVD copies of the programme are also required and will be coordinated with the attending TVM.

3.9 Photo Finish

The FIS Data and Timing service provider will supply and install photo finish camera technology across the finish line as specifically required by certain disciplines. This still image is available to the host broadcaster via the existing connectivity for the graphics service. The installation of the photo finish cameras should be carefully coordinated with the host broadcaster as the photo finish cameras must have priority in terms of positioning and installation.

The Jury will decide if a photo finish image is required to determine the final positions and evidence that the photo finish was used will be shown in the results tables.

3.10 Audio Considerations

In general directional microphones protected with windshields and woolly socks are positioned with both fixed and mobile camera units sending the audio signal back by triax (or via the RF transmitter) to the camera CCU.

Some stadium venues may benefit from spectator effects microphones positioned towards the main tribune or grandstand. Effects microphones are also required to capture the instructions to the athletes at the start of the competition.

Although the public address announcer does not need to be directly available as a source, the PA Audio source may be used to include the National Anthems.

For producing the flash interview (and any scheduled pre or post-race unilaterals) a hand held dynamic microphone should be available beside the mixed zone and close to the exit gate.

3.11 Use of music

FIS will supply a selection of music to the Host Broadcaster employing a theme used for all FIS Skiing events without the need for any specific music use reporting mechanism.

3.12 Podium Presentation

Towards the end of the live TV transmission, as soon as possible after the result is known the presentation of the top three athletes shall take place in the designated area.

The original site survey will help determine the exact position of this presentation and the camera positioning should be included in the coverage plan of the HB.

Athletes must attend the Winner's Award Ceremony with their competition suits, gear and clearly visible race bibs. TV interviews may take place following the podium presentation only in the designated Mixed Zone positions.

4. Unilateral TV Requests

Unilateral broadcasters are widely encouraged to attend the competition venue, both for customisation of their programming needs and to conduct interviews with participating athletes. FIS seeks to establish partnerships with broadcasting organisations that can provide:

- Extensive publicity
- Widest possible transmission activity and broadcasters with large audiences
- Guaranteed free to air broadcasts in the host nation

RHB's must approach the Marketing Agency to order broadcast services and facilities if they wish to be present at the event.

Depending on specific TV rights agreements, domestic unilateral broadcasters may approach the OC directly.

4.1 Unilateral Broadcaster Request Booking Details

Unilateral Broadcasters must present a detailed facilities summary to the TVM who will respond to and share the relevant information accordingly.

The table below presents an example of the items most likely to be considered by a Unilateral Broadcaster in preparation for a FIS Skiing event:

Item	Description (Example)
TV Compound Space	OB Van with operational dimensions Edit Vehicle with operational dimensions Tender Vehicle with operational dimensions
Power Supply	OB Van: Current (amps), phase and connector types Edit Vehicle: Current, phase and connector types Mixed Zone Position: Current, phase and connector types Commentary Position
Mixed Zone	Space required for an in-vision position subject to availability Summary of facilities to be installed in the mixed zone including lighting
Commentary Position	Partially or fully equipped with CIS Monitor, International Feed(s), Furniture & Heating
Production Container	If required and with approximate position Furniture Heating
CIS Data Monitors	Location and number to be provided
Unilateral Camera Positions	Brief Description of how many and their locations Use of RF units and wireless microphones
Host Broadcaster Signals	Example: 1 x World Feed Dirty HD + INT stereo audio 1 x World Feed Clean HD + INT stereo audio And any isolated camera feeds
Camera Stickers	Example: Camera stickers for fixed cameras in the mixed zone, in the competition venue and for ENG crew
Bibs	Example: For course inspection and mixed zone
VAPPS Parking	Example: OB Van, Edit Vehicle and Tender Vehicle in TV Compound Crew Cars
Security	24 hours from dd/mm/yy
Local Labour	Example 3 X helpers from 10:00 – 18:00 on dd/mm/yy 3 x helpers from 16:00 on dd/mm/yy
Telephone Lines	Arranged through local PTT as follows: 1 x ADSL OB Van 1 x IDD OB van 1 x ADSL Production trailer 2 x IDD Production Trailer 1 x ISDN commentary booth
Accreditation List	Names of people to be accredited:
Schedule	Brief description of schedule include arrival, rig, live TX and de-rig schedule

4.2 Commentary Booths

The host broadcaster is generally not responsible for the supply and installation of commentary booths, although each event is considered on a case by case basis depending on contractual agreements between the NSA, the TVM and the HB.

However, the commentary booths themselves must meet the following specification:

- Positioned in such a way that the Competition Site (e.g. Finish/landing area and the last part of the course) are visible preferably with a profile view
- Sufficiently noise protected and separated from other positions and the public
- Adequate space for commentator, co-commentator and an interview partner or guest
- A feed of the international audio signal
- Table for documents and workspace and 8 power sockets
- Heated with 2-3 coat hooks

The option of renting a partially or fully equipped commentary booth, programme monitor and stats/data feed monitor (CIS) should be offered. The data feed monitor is provided free of charge to the commentary booths by the FIS data timing service provider. Additionally free of charge WiFi or LAN shall be provided by LOC.

The multilateral signal will be available on 17" or 19" monitors.

Visiting broadcasters wishing to commentate at the venue must arrange their own commentary circuit bookings via their local national telecoms provider.

4.3 Mixed Zone and Flash Interviews

A dedicated Mixed Zone shall be provided next to the Finish Area, so that attending RHB's and other members of the media may conduct short informal interviews with the competitors. The Mixed Zone shall be set up by the OC in consultation with the TVM and the HB. The OC will provide the necessary supplementary access devices to the Mixed Zone, while the FIS Media and PR Coordinator will manage the mixed zone activities with the support of the OC.

The appointed TVM will coordinate pre- and post-unilateral requests and work closely with the FIS Media and PR coordinator to include the post-race flash interview.

There will be an established order in the Mixed Zone for RHB's, with the first position being offered to the rights holder of the host nation.

The OC will establish the best possible layout for the Finish Area depending on the available space and their drawings will include a number of specific media zones that can be defined as follows:

Partitioned TV Boxes or live Announce Positions where attending RHB's will conduct their presentations with their own on-site production facilities. Typically they integrate their own cameras with the feed from the HB to customise their show and provide their viewers with a strong venue presence. The TV boxes are positioned at the beginning of the Mixed Zone, so the athletes may pass in front of them as they make their way down the corridor.

The HB is obliged to provide the necessary facilities to conduct pre and post unilateral requests for the specific use by RHB's. Booking arrangements must be confirmed between the TVM and the attending RHB's according to a documented rate card agreement. Interviews may be conducted using the multilateral signal path at agreed times outside the main programme window.

The next part of the mixed zone is allocated to those who do not have live commitments, is adjacent to the athletes' exit and is allocated to ENG positions. Live radio crews and the written press may share this zone, although an order of priorities is to be established and observed.

There is a written and formal procedure for post-race interviews, although some variations apply depending on the event and host nation. As a general guideline, the following procedure applies for FIS World Cup events:

- Between the end of the race and the podium presentation, only the HB and the attending TV networks with live unilateral facilities are allowed to conduct short interviews with the top three athletes. This will enable the podium presentation to take place without delay as part of the multilateral feed.
- The broadcaster from the winner's home country will be the first to interview the athlete. Should the top three athletes belong to the same nation, the attending live broadcaster must decide the sequence of their interviews with the help of the FIS Media and PR Coordinator

Typically the flash interview (conducted in English via the multilateral feed) will take place directly before the podium presentation and in any case in the position as indicated in the running order.

4.4 Pre and Post Unilateral Transmissions

Bookable pre and post unilateral transmissions will be available at each competition venue. The facilities, provided by the HB will be available as a live source and carried via the multilateral signal path. Pre and post unilateral facilities will include a microphone, camera with lighting and operator as required. An interview may be conducted and recorded to videotape or videodisk with playback via satellite at a time to be arranged in advance. The pre and post unilateral transmissions will be co-coordinated via radio communication with the host broadcast facilities via the attending TVM.

4.5 TV Interviews during the Live Transmission of the Event

Interviews may be conducted at any time during the competition schedule from a dedicated live camera position. These interviews shall be part of the unilateral coverage of an RHB and will not be included in the multilateral signal.

4.6 Studio and In-vision Positions

Unilateral broadcasters wishing to use indoor or covered facilities with a view over the finish area are invited to submit their requests to either the OC (domestic broadcasters) or the TVM (international broadcasters).

In both cases RHB's are invited to attend a site survey to discuss their intentions and identify a suitable studio/in-vision position. Unilateral RHB's are responsible for building their own position including all broadcast facilities, furniture, lighting and security.

4.7 ENG Crews

RHB's may send ENG crews to FIS events, and may request a suitable shooting position in the finish area or beside the course. ENG positions will be available depending on the course length, dynamics and accessibility.

Broadcasters wishing to have ENG positions must send their precise requests well in advance of the event, and must choose from the options made available by the OC and which do not directly conflict with the HB's coverage plans.

5. Accreditation and Supplementary Access Devices

5.1 Accreditation

As a general rule, although there are variations to the procedure depending on the specific agreements between FIS, the NSA's and the OC's, foreign broadcasters may approach the respective Marketing Agency with their accreditation requests.

Broadcast media accreditation requests are handled by the Marketing Agency. The accreditation for media such as photographers and the press are managed by the OC. However, the distinction between foreign and domestic media is not always applicable.

In some cases, where foreign media accreditation requests are made directly to the OC the information is immediately shared with the Marketing Agency so the management of the foreign media requests is handled by the same organisation.



Example Accreditation

In turn, the OC is advised to have a representative 'TV Contact' at the press office dealing with TV personnel, taking care of their accreditation, providing them with the necessary information and updates. This person will hand out accreditation only to the representatives of the HB and other RHB representatives.

The requests coming from domestic media are typically dealt with directly by the NSA/OC when they are responsible for domestic media rights in the host nation.

When the Marketing Agency also holds the domestic rights, he is the one managing all the accreditations, even those for domestic broadcasters. This also applies to supplementary access devices and to unilateral broadcasters.

5.2 Camera Stickers

Besides the personal accreditation to be given to the media personnel, each authorised TV camera should be identified with an 'accreditation' sticker. As implemented in previous years, RHB's with season long contracts will be offered one and the same sticker to identify their TV cameras throughout the season. It will be delivered to the RHB by the Marketing Agency before the beginning of the season.

In some cases, where RHB's may have an interest only in a single event, the Marketing Agency will prepare camera stickers that are valid for that event only.

Cameras belonging to the HB with fixed and permanent positions do not need stickers, but it is imperative that those working at the Finish Area display the authorised camera stickers at all times, to conform to the security access procedures.

The OC will inform the Security Manager that only TV cameras with the relevant sticker may access the Finish Area (and, more generally, any competition area) and FIS expects the full co-operation of the OC regarding restricted access to sensitive parts of the competition site.

5.3 Operator Bibs

A further access device will be required by all personnel who need to work in the competition area and the OC is required to supply:

- A unique bib to identify the HB personnel (and supplied by the HB) working in the competition area and in the Finish Area. It is important that the bib is very visible so that the personnel can be identified easily in the competition area and/or in the Finish Area as members of the host broadcasting crew. A clear colour distinction will support the strength of the course security operation, as well as the protection of TV rights to eligible broadcast partners
- A different bib or an armband is used to identify the rights holding cameramen and production teams, including TV commentators, allowed in the competition area prior to and during the competition. It is understood that television presenters appearing in vision do not need to wear their bibs or armbands when “on air” in vision. For the Mixed Zone Area, the Marketing Agency provides each unilateral RHB with a laminated cardboard directly on-site, a so-called “LIVE TV BOX CARD”. This card is customised for each venue with the total number of such LIVE TV BOX cards depending on FIS approval
- Another bib or armband, of a different kind or colour, (or simply a laminated thin cardboard) for the TV personnel who are admitted to the inspection only, (depending on FIS approval)



5.4 Vehicle Access Passes

Due to limited availability, vehicles wishing to enter the TV Compound or surrounding parking areas need to submit their requests including Vehicle Licence Plates (where possible) to the TVM (for international broadcasters) and to the OC (for domestic and host broadcasters).

RHB's should specify if their vehicle requires TV Compound parking or parking in the nearest available parking area. Information regarding commercial vehicles will need to include the operational dimensions (including expanding sides when parked and tailboard access).

Attached is an examples of a vehicle access pass:



6. Venue Logistics

6.1 Logistics

The OC together with the HB and FIS Race Director or Event Coordinator must select suitable locations for camera positions and platforms, the commentary tribune, mixed zone, podium position, TV Compound and associated production and timing offices. Provision must also be allowed for an uninterrupted power supply, parking facilities, toilet facilities and catering.

The OC must also be responsible for the security of and safe access to all operational areas, including the preparation, management and distribution of accreditation. The TVM will be responsible for the management and distribution of accreditation requests from international members of the electronic media.

6.2 Starting Time

All FIS events will start at the published scheduled start time including qualification and preliminary heats. Any changes to the schedule due to unforeseen weather conditions or other circumstances will be decided collectively between the FIS Race Director, FIS Event Coordinator and the OC.

6.3 Venue/Region Information

The HB is required to include at the beginning of the pre-race multilateral running order a one-minute video sequence showing the natural beauty/ items of interest/profile of the host city or region.

7. Event Operations

7.1 Definition of Roles and Contributors

FIS RACE DIRECTOR

Is the most senior officiating member of the competition management and his/her duties include the health and safety aspects of the competition venue and the surrounding environment. The race director has a key role to play in all matters affecting the sporting activity and the running of the competition. The race director is also responsible for the timing of the event as well as making decisions regarding the weather and other conditions.

FIS EVENT COORDINATOR

In addition to various other functions is the link between the Host Broadcaster and FIS, the Marketing Agency as well as the jury.

FIS TV SUPERVISOR

As described in the division of obligations table, the FIS TV Supervisor, working under the guidance and authority of the FIS Race Director, will be appointed to a specific number of events and will attend the initial planning survey, following the planning and progress until the final delivery. In particular the FIS TV Supervisor will contribute to the decisions made regarding the competition venue infrastructure and TV compound logistics and act as a point of contact to ensure all the deliverables are provided as agreed during the site survey.

TV AND MEDIA RIGHTS MANAGER (TVM)

International TV and Media rights are carefully coordinated by the appointed Media partner who will attend each and every event during the calendar season. The TV and Media Rights Manager (TVM) represents the interests of the international broadcast partners and will ensure a strong and effective planning relationship between the NSA, OC and host broadcaster, as well as attending and non-attending rights holders.

The TVM is the principal point of contact for all broadcast partners, particularly for those choosing to attend the event and which require access to the programme feed, isolated camera requests, power, commentary facilities, parking, accreditation, accommodation, office containers, security and local labour. They may have also booked local broadcast facilities and crew to assist with their programming needs at the competition venue. Providing these requests are made within the notified deadlines, the TVM will ensure that the HB is aware of the requirements and the necessary planning is in place to accommodate them.

The TVM will also check the TV Compound layout in terms of space for the international uplink and any attending RHB's who may arrive with their own facilities to customise their programme from the competition venue.

The TVM will work closely with the OC, HB and FIS TV Supervisor to ensure the planning process runs to time and according to any written deadlines.

During the event phase, the TVM will produce and distribute an approved multilateral running order for each competition and will need to be sure that the running order is followed according to the published format. The TVM will ensure the international world feed is delivered to the standard required and coordinate any pre and post unilateral requests on a daily basis.

HOST BROADCASTER PRODUCER/PRODUCTION MANAGER

The principal point of contact representing the host broadcaster, will be available to handle all requests regarding the host broadcaster's responsibilities and is the likely interface with attending rights holders. The production manager will attend the initial venue survey and distribute the relevant documentation as follow up to the planning survey. The production manager will manage the activities within the TV compound designing a schedule for the park and power process and making sure all the cabling requirements are met according to specific requests and deadlines. The production manager will also work closely with the OC regarding practical considerations such as power supply, security, parking and course access.

FIS MEDIA AND PR COORDINATOR

The FIS Media and PR coordinator acts as an interface between the media and the athletes and typically arrives two days before the first competition.

Among other responsibilities, the Media and PR coordinator checks the facilities, structure and flow of the mixed zone and finish area ensuring that members of the media are given opportunities to speak with athletes after their race.

The Media and PR coordinator will manage the appropriate leader presentation which allows the TV audience and local spectators to see who is the current leader. The athlete may change several times during the course of the competition.

The Media and PR coordinator will also conduct the post-race interview for the multilateral feed and will work closely with the TVM and HB to co-ordinate exactly when that will take place.

CHIEF DATA AND TIMING SUPERVISOR (WHERE APPLICABLE)

The role and expertise of the Chief Data and Timing Supervisor may be summarised as follows:

Communicating and coordinating with all attending parties (FIS, TV/HB and the OC)

Managing all operational aspects of the timing and data service

Supervising the installation and setup of the timing and in venue results technology (timing, scoring, data handling, results, scoreboards, TV etc.)

Having considerable knowledge of the sport and competition rules

Attending the initial venue survey (as required)

Ensuring the planning, deadlines and required quality and quantity of deliverables are respected

Representing the interests of the timing and data service at venue meetings, operations and official events

CHIEF OF STADIUM (CS)

Reports to the Chief of Competition and is responsible for all activities in the stadium area. This includes the flow of competitors to the starting area, equipment marking, commercial markings, equipment control in the finish area, the flow of athletes from the finish area and providing support for anti-doping controllers.

The CS also supervises the installation of fencing, course markings and signs in the stadium area as well as coordinating the placement of the start and finish lines with the data and timing supervisor.

The CS is responsible for the security aspects of the stadium area including access and control for competitors, coaches, service personnel and the media including the preparation of the mixed zone.

The CS must make sure there is sufficient lighting to provide adequate working conditions

CEREMONY CHIEF (CC)

Reports to the Chief of Competition and the OC Chief and is responsible for the entire Winner Presentation and Prize Giving ceremony. The CC will coordinate with the FIS PR & Media Coordinator, the speaker, TVM and the Host Broadcaster regarding the exact position and timing of the ceremony. The CC will ensure that everything is prepared immediately after the race and the designated representatives are in position. Overall the CC will ensure a well presented winner ceremony according to the FIS Guidelines.

7.2 Contingency

In the event of adverse weather conditions or other circumstances threatening to postpone or cancel a scheduled event, the TVM will discuss the options with the FIS Race director, FIS Event Coordinator and OC. If an event is rescheduled the information is quickly distributed to domestic and international broadcast partners via the TVM. Even if the competition is postponed or cancelled the host broadcaster should come on air at the scheduled time with live weather conditions and an explanation of the problem and the reason any decision was taken.

7.3 Competition Communication

Although the host broadcaster is not expected to maintain permanent radio communication with the FIS Race Director, relevant issues will certainly be discussed before and perhaps during a competition via the FIS Event Coordinator.

7.4 Public Address System

The speaker and/or moderator, when present, must be informed in detail of the way the competition will be used by broadcasters, so that the use of the loudspeaker does not spoil the event for a broadcaster which may shuffle the order, create highlights or broadcast strategic phases of the competition. This is particularly valid for broadcasters who have in-vision or studio positions at the venue and whose announcers are recording suitable links for their final programme.

The volume and content of the public address sound throughout the venue must be co-ordinated between the HB and the OC.

8. Event Phase

The Cross Country experts have prepared information regarding the preparation immediately prior to the competition. This is reproduced in this section 8 as it provides information which could assist for the final on-site preparations for all disciplines.

8.1 Run up to the first TX commitment

As soon as a FIS Cross-Country Skiing competition reaches the final planning week a number of scheduled activities must take place to fully prepare the venue, course and broadcasting arrangements in a relatively short amount of time. The following table provides an example for a combined format race (i.e. a sprint with a middle or long distance format).

Days before TX	Description
- 5 Days	Tender and support vehicles travel and park
- 4 Days	Assemble all camera platforms as well as initial cabling for both race formats.
- 3 Days	Cabling continues
- 2 Days	Director and Timing Supervisor agree and identify pre and intermediate timing points as per the survey details HB Outside Broadcast vehicles arrive as well as any mobile production facilities for attending rights holders TV Compound park and power Complete cabling, position and install cameras and microphones
- 1 Day	Initial meeting and inspection of the finish area/TV position with OC, chief of press/media to discuss any details SNG vehicles park and power with cabling to the HB production vehicle Complete OB Van configuration and perform technical facilities check before the end of the day and according to local daylight conditions As part of the facilities and production rehearsal produce the test race with timing (as required and agreed on a case by case basis) Commentator's briefing (as required) TV coordination meeting to include current progress, all technical issues, running order brief and programme of unilateral activities Third and final meeting with all FIS management parties, the OC including Chief of course, Stadium and ceremonies and the venue announcer
TX Day 1	Complete Race 1 and reset of course for race 2
TX Day 2	Full facilities check and rehearsal followed by race 2

8.2 Camera Production Test and Rehearsal

The competition format, location and experience of the host broadcaster will determine the necessity to conduct a full test race in advance of the first televised commitment and this requirement should be considered on a case by case basis.

If required, the NSA and OC will organise a junior or amateur race in good time in advance of the first competition. The 'test' race will take place at a specific time and must include a full timing service and a post-race presentation.

Some experienced broadcasters use a skidoo travelling at a similar speed to the athletes to step through the camera positions and cutting sequence.

8.3 Daily Call Sheets

The HB is expected to distribute call sheets on a daily basis to their production crew to include the necessary checks of their production facilities including the interface with timing and signal path to the uplink vehicle.

All pre and post unilateral requests must be included in the daily call sheets.

EXAMPLE DAILY CALL SHEET

Time	Description
08:00	Engineering crew arrive on site and check power and facilities
09:00	Production crew arrive on site, (cameras, audio assistants, VTR, graphics, uplink)
09:15 – 09:30	Production briefing
09:30	All camera operators and crew to positions
10:00 – 10:30	Full faces check and rehearsal
10:50 – 12:30	On Air Race 1
12:35 – 12:45	Post unilateral 1
12:45 – 12:55	Post unilateral 2
13:00 – 14:00	Lunch
14:00 – 14:20	All cameras and crew in position
14:20 – 15:30	On Air Race 2
15:35 – 15:45	Post Unilateral 1
15:45 – 15:55	Post unilateral 2
16:00	Off air, de-rig and power down

9. Advertising Considerations

9.1 Advertising Considerations

One of the principal methods of financing the costs associated with staging FIS competitions is through event sponsorship. Sponsors play an invaluable role in supporting the NSA's and OC's at the event level by providing a substantial part of the funding and promotional support. In addition, they provide much of the funding that supports long term development and grassroots programmes in the sport. These sponsors derive the majority of value in their investment from the advertising exposure they receive through the broadcast coverage.

For this reason it is important that the HB and those responsible for handling the on-site advertising operations for the sponsors at each race establish an effective working relationship to best meet the objectives of the broadcasters and commercial partners.

9.2 FIS Advertising Rules

The document 'FIS Advertising Rules' contains the strict guidelines for advertising possibilities in the Competition Area and in particular the areas in the view of the television cameras featured in the production plan.

The guidelines contain general advertising principles for all FIS events and point out an exact description of the advertising possibilities for each individual event.

The organisers assigned to carry out an event by FIS and their NSA's are responsible for the observance of these advertising rules. Objections and complaints can be made to the respective NSA or to FIS and in case of non-observance the organisers are fully liable towards the FIS Council as well as the respective NSA.

The FIS Advertising Rules for all disciplines are published on the FIS homepage www.fis-ski.com.

9.3 FIS Marketing Guide

Since the season 2010/11 FIS has established together with FIS Marketing AG a new marketing concept affecting a number of disciplines, which is updated on a regular basis. All details of the concept and its installation for all disciplines are published on the FIS homepage www.fis-ski.com.

9.4 Advertising Check

The OC together with the HB and the Marketing Agency must complete a final check of all advertising related matters at least two hours before the first scheduled competition. Advertising personnel are not permitted to leave their positions later than one hour prior to the competition and therefore will need to finalise the advertising installation before that time.

During TV rehearsals or training runs, the advertising manager is advised to check the positioning of advertisements by looking at the TV picture in the TV Production Office or OB van. The advertising check is based on a balance of the 'FIS Advertising Rules' and the sport security aspects, especially regarding the selected camera positions, the selection and installation of advertising spaces and special advertising elements, e.g. inflatables in the Competition Area.

9.5 Placement of Advertising Banners in the Competition Area

The advertising installation is positioned by the Marketing Agency in collaboration with the HB and under the supervision of FIS during the preparation of the competition venue.

The OC together with the Marketing Agency is obliged to ensure that advertising banners are fixed on appropriate installations taking account of safety requirements. The exact dimensions of the material and the frames depend on the type of events and the space available.

10. Graphics Data and Timing

10.1 FIS Graphics, Data and Timing Partner

FIS, in close partnership with its chosen third party service provider is responsible for the data and timing service that will deliver the FIS TV graphic presentation used during the transmission of the international signal for any given FIS event.

The service provider, under the supervision of the TV Producer, will be responsible for the complete graphics presentation, including the overall race timing, pre and intermediate timing, results and standings, course/hill profiles, name supers, photo finish, weather, title, TV Director credit etc. This data and timing service:

- Shall be a component of the international world feed and will therefore be seen by all RHB's in their TV transmissions. The service is provided in the English language
 - Will be inserted with the corporate name/logo free of charge by the HB according to the Advertising Rules which are attached
- RHBs will not remove any identification when transmitting the multilateral signal

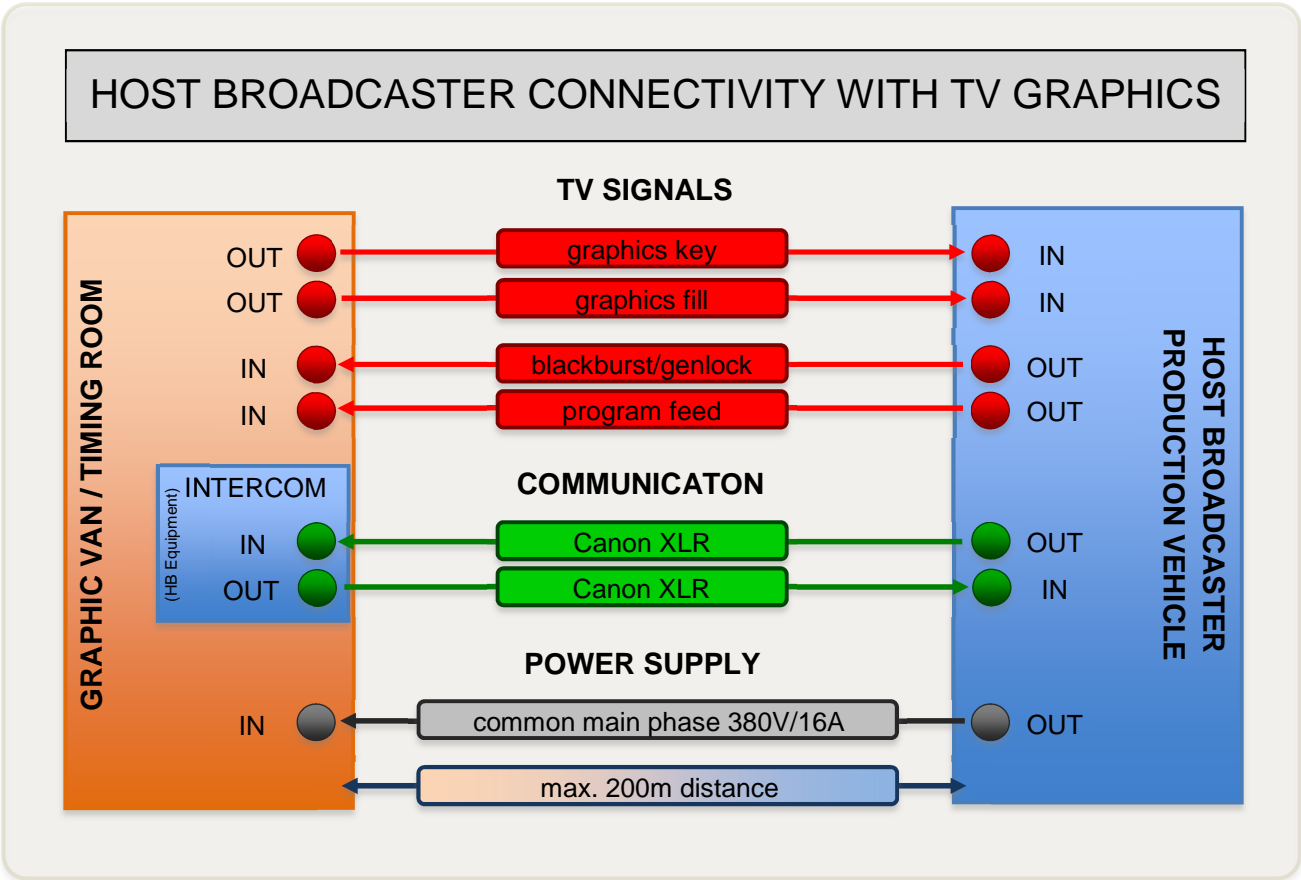
The HB is responsible for providing and installing the necessary cables from the timing and data room to the production vehicle/facilities including a talkback system. The HB must also provide a colour monitor for the timing room with the dirty programme feed.

The graphics, data and timing partner will also be responsible for the photo finish technology and will make available this image to the host broadcaster as and when required. As a standard component of each running order, a course/competition venue profile animation is included in the format and this will be prepared and delivered by the timing partner.

Typically the animation is pre-recorded to EVS by the HB and used in rehearsal and during the programme at the HB's convenience.

The data and timing service operation will be located as conveniently as possible to the TV Compound infrastructure and the location will be identified during the site survey.

The connectivity can be summarised as follows:



11. TV Ratings

At the end of the season in April of the current year, the RHB's are invited to provide data regarding the ratings of skiing event broadcasts.

The FIS and the NSA's will receive, free of charge, a review on the TV ratings for the transmission of skiing events through the national networks.

All RHB's are requested to use the FIS TV rating form (**copy annexed**).

12. Glossary of Terms

Analogue	A continuously variable signal, circuit or device designed to handle such signals. Opposite to digital.
Aspect Ratio	The aspect ratio of an image is its width divided by its height. For television and video applications, aspect ratios are pronounced 'x-by-y'. The two common videographic aspect ratios are 4:3, universal for standard-definition video formats, and 16:9, universal for high-definition and digital television.
Bookable Facilities	Technical or production services, facilities or equipment that can be reserved by Broadcast Partners for their own use.
Broadcast Compound	A specific area at a venue designated for the parking and operation of mobile technical and production trucks, office trailers, SNG and other vehicles.
Broadcast Partner	A Broadcaster that has acquired the rights to broadcast (a) FIS World Cup race(s) in a particular territory or territories, also known as a RHB (Rights Holding Broadcaster).
Commentator	Radio or television sports announcer commentating on the event. Commentator may work from a commentary position at the venue, or in some cases 'off tube' using the multilateral signal at a remote location.
Downlink	Segment of the satellite circuit from the satellite to a receiving dish. To complete the connection an uplink is required.
EET	Equivalent Electric Time: An official time measurement determined from the back up timing systems for a time missing from the primary timing system.

ENG	Electronic News Gathering, using a portable lightweight field camera. Typically used by a small production (or ENG) crew.
EVS	The name of the manufacturer of an industry standard video disk recorder used for slow motion replays and creating highlights packages.
Feed	Television or radio programme transmitted, or fed, to Broadcast Partners.
Flash interview	Brief interview of athletes done just before or immediately after the race. Often used as a term to describe an interview included in the multilateral world feed.
FIS	Fédération Internationale de Ski
Frequency	The number of cycles per second of wave signal. Measured in Hertz (Hz) or kilohertz (kHz) or MegaHertz (mHz).
GMT	Greenwich Mean Time, which is universally recognised and fixed and not affected by regional daylight saving adjustments and is used as the reference to determine event schedules, broadcast transmissions and running orders.
HB	Host Broadcaster. A television network or production company responsible for producing the international television signal of the competition for use by RHB's. The HB also coordinates their unilateral requirements and ensures the distribution of the television signal.
HD/HDTV	High Definition Television. High-resolution digital television combined with Dolby Digital Surround Sound.
Injection Point	Technical facility that allows Broadcast Partners to play back and send recorded footage to their home station.
ISDN	Integrated Services Digital Network. A technology using telephone lines which provides improved audio quality for transmission and a number of implementation types allowing digital data transfer.
Media Tribune	Part of the spectator stand specifically reserved for media such as written press, photographers, TV and radio commentators and observers. Accessible only with the appropriate accreditation.

Mobile Uplink or SNG	A mobile communications satellite earth station. Mobile units are usually vans equipped with advanced, two-way audio and video transmitters and receivers, using dish antennas that can be directed at geostationary satellites.
Multilateral signal	The multilateral television signal produced by the HB. It is impartial and produced so that there is no focus on one particular athlete or country. The multilateral signal contains graphics, replays and natural sound from the venues, but not commentators, interviews or advertising.
NSA	National Ski Association
OB Van/Truck	Outside Broadcast Vehicle. Mobile television production control room for remote coverage of an event, using a range of standard broadcast facilities. Sometimes additional vehicles are used as dedicated videotape or graphics support vehicles, and are designed to integrate with the principal OB vehicle.
OC	Organising Committee
Ratings	The rating of a show is the percentage of households watching a particular programme in relation to the total number of television households in the country.
RHB	Rights Holding Broadcaster(s). A television company that has acquired the rights to transmit an event. RHB may either have production staff at the event to customise its programming through integrating unilateral production with the multilateral signal or receive the multilateral signal at its home studio to create its programme.
Shares	The share is the percentage of households watching a show in relation to the total number of households that are watching television at a given moment in time.
SSM	Super Slow Motion, a broadcast industry standard to describe a video processing system that delivers individual frames at high speed, typically 75 frames per second, or a field rate of 150/s. Providing that both a camera system and the recording system are operating at 150/s the replayed signal is of very fine quality, and highly suited for sports broadcasting.
Timing	The timing clock is activated when a skier passes through a pivoting, knee-high wand to begin his or her run.

Transition Replay Wipe	The short animated movement or wipe, used to signify the transition from live pictures to a replay or sequence of replays. The same applies in the reverse direction, from the last replayed item back to live pictures.
Unilateral Signal	An individual or single production/transmission intended for a specific destination or territory. Unilateral Broadcaster is also a term given to RHB who has reserved unilateral facilities for services and equipment for its own purposes.
UPS	Uninterrupted Power Supply. Used for critical broadcast or event deliveries when the primary source of electricity is supplied from the local grid. Should there be a power failure, the UPS protects the demand, first by a series of heavy duty batteries to supplement the power and then by electricity from a diesel generator. The process is a seamless function designed not to disturb or interrupt the power supply for the broadcast or live event operation.
Video Control	The video controller will control that the gates are passed correctly.
Yellow Jackets	Industry standard protective cable trays, for indoor and outdoor use in order to identify a cable path in a safe and protective jacket. Usually positioned at ground level, where the cable path crosses an area also used for public access.