

**“ALQUILER UNIDAD MÓVIL PARA LA PERSONALIZACIÓN DE
LOS PARTIDOS UEFA NATIONAL LEAGUE DE LA SELECCIÓN
ESPAÑOLA (MILAN-TURIN) ”**

Pliego de especificaciones técnicas

El objeto del presente pliego es establecer las características técnicas por las que se ha de regir el contrato del servicio de alquiler de unidad móvil de producción de televisión para la realización en HD y sonido Stereo, de los telediaros y la señal de los dos partidos que juega la selección española los días 6 y 10 de octubre con motivo la fase final de la Nations League 2021

1.-DESCRIPCIÓN DEL SERVICIO

Unidad Móvil HD

El adjudicatario tendrá que aportar medios materiales y recursos necesarios para prestar el siguiente servicio:

1.1.- MEDIOS MATERIALES (marcas y modelos sugeridos o similares)

- ✓ **Cadenas de cámaras HD,**
 - 4 cámaras estándar Sony, Grass Valley, etc.
 - **Cableado ver Anexo I para cumplir con los requerimientos UEFA**
- ✓ **Ópticas;**
 - 2 ópticas Angulares 11x4,5/4.2 o similar
 - 2 ópticas 18/17x7.6 o similar
- **Medios Mecánicos;**
 - Cámaras irán sobre trípode con dolly, con la posibilidad que algunas de las cámaras pasen a hombro, con soporte Easy-ring o monopies.
- **Mezclador:**
 - Mezclador de vídeo con DVE 3D de 2 canales, 2 ME completos (todos con DVE 2D/ RESIZE) y 4Key por bus.
 - Mínimo de 24 entradas.
 - 8 stores HD correspondientes a los 2 ME para almacenamiento de still y clips
 - Monitorado de presencia configurable para un mínimo de 24 señales y un mínimo de 8" por cada señal.
- ✓ **Sistema de grabación y reproducción.**
 - EVS XT 8CH
 - 6 entradas de grabación, con 2 salidas
 - 2 puesto de trabajo
 - 2 XDCam para grabación y reproducción, los soportes físicos los aporta TVE.

- **Comunicaciones**

- 2 equipos de audio codeq, para coordinación con Control Central Torrespaña y retornos de audio N-1
- En unidad móvil, en todos los puestos de trabajo, se incluirán un microcasco por puesto.
- Unidad móvil, con unidad que realiza señal multi.
- Comunicación alámbrica con ETT personalizada.
- Comunicaciones inalámbricas 3 frecuencia diferentes, para equipo de montaje (2), equipo de sonido (3), equipo de producción (2).

(Sistemas full-duplex para equipo de sonido)

La unidad adjudicataria tendrá que proporcionar todos los elementos de intercom necesarios, véase terminales, beltpacks, walkies y cascos, para poder acometer dicha producción.

ANEXO II y ANEXO III: Documentos a cumplimentar

- **Sonido**

Control Room

- Consola de Sonido con 32 faders de operación como mínimo.
- 64 canales de entrada como base inicial, con al menos 24 nivel micro.
- Interfaces de entrada AES3, MADI, SDI, Línea y micro.
- Medidores PPM dBFS.
- Matriz de Audio digital para gestión de recursos.
- Distribuidores de audio.
- Embebedores y Desembebedores de Audio.
- Sistema de Monitorado Principal y Monitorado de campo cercano estéreo.
- Daw para reproducción de audio, playlist, edición, etc....
- Aplicacion de reproducción y grabación, Wavelab.
- Matriz de intercom para gestión de comunicaciones, retornos, IFB, etc.....

Material auxiliar

- 2 micrófonos estéreo de cañón.
- 2 micrófonos mono de cañón.
- Soportes para Micrófonos de Cañón compatibles con las Cámaras
- 2 micrófonos de mano Cardioides para entrevistas, unilaterales y varias posiciones.
- Al menos 5 Microcascos de condensador para posición de comentaristas.
- Al menos 6 Sistemas Completos de Micrófonos inalámbricos, con posibilidad de mano, lavalier y diadema.
- Al menos 2 sistemas Inalámbricos de Emisión (micro de mano) y Receptor portátil conectado a través de circuitos de Cámara o Sistemas Alternativos.
- Al menos 2 sistemas Inalámbricos de Monitorado con In-Ear) y Transmisor portátil conectado a través de circuitos de Cámara o Sistemas Alternativos.
- Amplificadores de cascos IFB.
- Amplificadores de cascos para posición de comentaristas.
- Posibilidad de canales de coordinación bidireccional en posiciones de comentaristas y presentadores.

- Pies de micrófonos pequeños, medianos y jirafillas.
- Cableado de audio, cajas, pulpos, y multipares de diferentes pares y medidas.

****Cableado ver ANEXO I para cumplir con los requerimientos UEFA**

Se incluirán las pilas necesarias, en todos los sistemas inalámbricos.

• **Puestos de trabajo en Unidad;**

- Puesto de realización con capacidad para albergar 1 operador de la consola de mezclas y 1 persona de realización.
- 2 puestos de operador de EVS.
- Puestos para 1 control de imagen,
- Puestos para 2 Encargados de sonido.
- 1 puesto de editor
- 1 puesto productor

VARIOS

- El servicio se prestará en la zona habilitada y con conexión eléctrica proporcionada por UEFA.
- Indicar en oferta las especificaciones de tipo de conexionado y consumo.

****Ver Anexo IV para cumplir con los requerimientos UEFA y presentar certificados.**

- La unidad ha de contar con sistema de alimentación ininterrumpida ante fallo temporal de acometida eléctrica, que garantice como mínimo 8 minutos ante caída de tensión, y conmutación de a otra fuente de energía.
- El puesto de control de cámaras estará compuesto con control remoto individual por cámara y monitorado técnico: monitor forma de onda, vectorscopio y monitor grado 1
- Todo el cableado y los sistemas de anclaje y protección para el tendido y volado del cableado necesario, para la realizar dicha producción.
- El número de monitores mínimo es: pitch reporter (1 monitor), Flash Interview (1 monitor). Posición comentarista "in visión" (2 monitores), 2 en tribuna de presentación
- Contribución e Intercambio de señales (video, audio, datos e intercom) , con unidad multi, gráficos etc..

- ✓ Beauty C25
- ✓ Master C1
- ✓ Close up C2
- ✓ Team A C14/Team B C15 (Spain feed)
- ✓ C18 LB Left
- ✓ C19 LB Right
- ✓ MULTI (X)
- ✓ MULTI BACK UP (Y)
- ✓ SERVICE FEED 1
- ✓ COACHING FEED
- ✓

- El idioma de trabajo en la producción es el preferiblemente castellano.
- Indicar en oferta las especificaciones de tipo de conexionado y consumo.

1.2. RECURSOS NECESARIOS

Se aportarán los recursos necesarios para el montaje y puesta en servicio de la unidad. Se ocuparán de las labores de configuración, montaje de equipos, resolución de incidencias, así como el asesoramiento técnico al personal que aporta TVE, durante la producción.

Todo el personal operativo será aportado por TVE.

2.- PLAN DE TRABAJO

Localizaciones

Estadio Giuseppe Meazza de Milán (San Siro)

Juventus Estadio de Turín.

Horarios

- 03 de octubre –Aparcamiento
- 04 de octubre – 10:00 /20:00 Montaje – Por la tarde pruebas
- 05 de octubre (MD-1) – 13:00 / 22:00 TD1 + Programa Previo con Prensa y Entrenos + TD2
- 06 de octubre (MD) – 13:00 / 00:00 TD1 + Partido Semifinal + TD2 2.

Opción 1-Si gana selección española (juega Final, Estadio San Siro)

-
- 07 octubre –Telediaros
- 08 octubre – TD2
- 09 octubre (MD-1) – 13:00 / 22:00 TD1 + Programa Previo con Prensa y Entrenos + TD2
- 10 octubre (MD) – 13:00 / 00:00 TD1 + Partido FINAL + TD2 + Desmontaje

Opción 2-Si pierde selección española (juega 3º/4º, Estadio Turín)

-
- 07 octubre –Desmontaje Estadio San Siro y aparcamiento en
- 08 octubre – 10:00 /20:00 Montaje – Por la tarde pruebas
- 09 octubre - (MD-1) –13:00 / 22:00 TD1 + Programa Previo con Prensa y Entrenos + TD2-
- 10 octubre (MD) – 12:00 / 00:00 Partido + TD2 + Viaje de Rivero y Comentarista a Milán a narrar la final + Desmontaje
- Estos horarios previstos pueden estar sujetos a variación por necesidades de producción sin que esto genere cargo económico.

3.-CONTENIDO DE LA OFERTA TÉCNICA

La oferta debe incluir la siguiente información:

- Oferta técnica obligatoria: dossier que incluya detalle de los equipos aportados, de forma que permita la comprobación de que se cumplen todos los requisitos detallados en este pliego técnico.



UEFA Nations League Finals

Fibre Optic Pre-Cabling for Visiting Broadcaster Facilities Technical Specification

Overview

Starting from 2016, UEFA has been installing an extensive fibre optic pre-cabling system at the three UEFA Club Competition finals venues and the two UEFA Nations League finals venues. This provides pre-cabled infrastructure from the TV compounds to most TV facilities, in order to reduce or eliminate the TV cabling that will need to be installed at the venues by visiting broadcasters. This document lists those facilities that will be pre-cabled by UEFA and describes the technical specification of the fibre optic infrastructure that will be provided.

Visiting Broadcasters should liaise with their technical service providers in advance in order to ensure that compatible equipment is brought to site in order to take advantage of these facilities.

Cabling Technical Specification

All cabling will be installed using a single common format of fibre optic cable and connector as follows:

- Single-mode fibre optic terminated at each end with SC/PC connectors



This standard has been chosen due to it being already widely used within the broadcast industry. With suitable interface equipment, single-mode fibre optics may be used to reliably carry almost any type of TV signal (cameras, video, audio, comms, IP networks etc.) over long distances, with immunity to electrical interference. A wide selection of fibre interface equipment is now

commercially available to suit the needs of all broadcasters – some examples are given later in this document.



The connections will be presented at both ends on SC/PC patch panels for neatness and robustness.

- Each facility position will be equipped with its own dedicated multi-core fibre cable, allowing comprehensive connectivity from the TV compound to each position in the stadium.
- All fibres will be installed as direct connections from the TV Compound to a location close to each position. There will be no intermediate patch rooms or connection points which can lead to loss of signals or signal attenuation.

Connecting to the system – in the TV Compound

Broadcasters will connect to the pre-cabling at a centrally located hand-over point on the TV Compound, known as the 'CIR' (Cable Interconnection Room'). The CIR will adjoin the TOC area, providing on-site broadcasters with a single connection point for their TV signals.

The CIR will offer space and technical power for broadcasters' interface equipment if required. Alternatively, the fibre optic connection may be extended (by the visiting broadcaster) over the TV compound, where the interface equipment may be conveniently located within their OB vehicle.

Connecting to the system – in the Stadium

The pre-cabling infrastructure will be made available in the following areas within the stadium. The table details the number of optical connections per position (these are *per position*, are all available to the broadcaster who has booked that position and may be used however they wish). Backed-up technical power for interface equipment will be available at all locations.

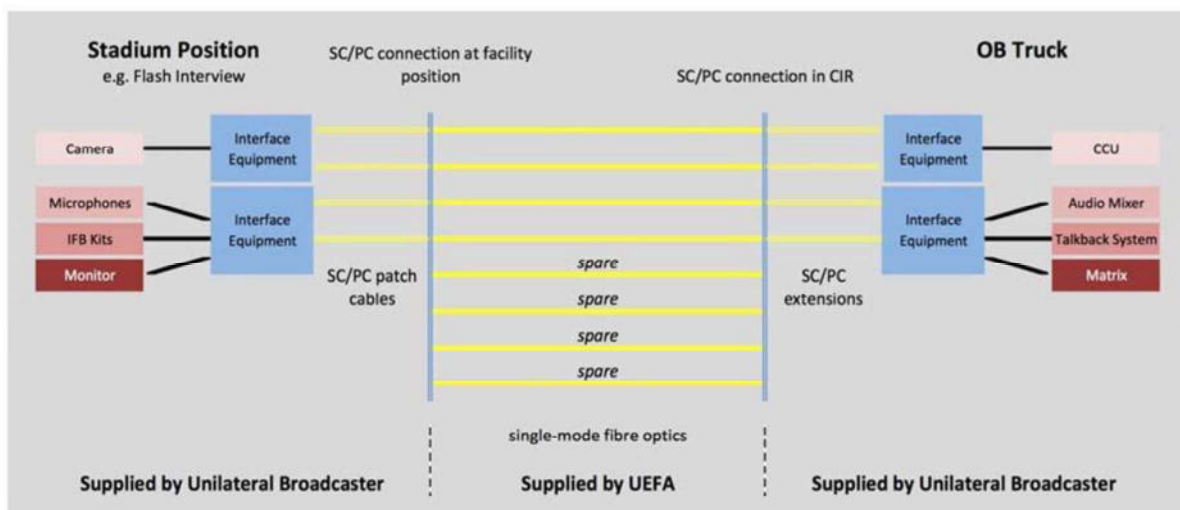
Position	Connections per position	Max Distance from position to connection point
Pitch-Side Presentation / Flash Interview	8	10m
Pitch-View Studio	16	within studio
Tribune Presentation	16	on platform
Commentary Position (only upon separate request in FAME)	8	20m
Pre-cabled Camera Position	8	20m
Pitch Reporter	4	10m

The distance shown indicates the maximum onward cable length that will be necessary for each broadcaster to supply in order to reach each interview/presentation position from the UEFA fibre connection points within the stadium.

In the case of studios and presentation platforms, a dedicated fibre termination point will be installed within each studio/platform.

Example Configuration

This diagram illustrates how a typical position (e.g. a flash interview position) would use the pre-cabling connectivity.



Interface Equipment

There is now a wide selection of equipment on the market that allows broadcasters to easily take advantage of fibre optic cable infrastructure. The following equipment, while not being specifically recommended by UEFA, gives examples of suitable interface equipment that could be employed.

Cameras

Bluebell Shax, Lemo Meerkat, Telemetrics HFT, Grass Valley Cobra and Telecast SHED are just some examples of systems that allow the use of SMPTE Fibre- or Triax-based camera systems over single mode fibre infrastructure.



Video, Audio & Data

Bluebell Caddie, Joseph Electronics EXP, Telecast StudioLink and Grass Valley Viper II are examples of flexible OB-friendly systems that allow the transmission of video (from analog up to 1080P 3Gb/s), audio and many other types of signals bi-directionally over single mode fibre infrastructure.



Notes

The following restrictions and limitations should be noted:

- Not all facilities will be pre-cabled – the infrastructure will be limited to only those areas listed in this document. It will not be possible for UEFA to provide pre-cabling infrastructure to any additional areas.
- All facilities installed by UEFA will be fully tested prior to the broadcasters' arrival on site. Additionally, a support technician will be made available on site by UEFA to support the cabling system.
- Redundancy and back-up cabling will be installed at all locations
- In the interests of standardization, all pre-cabling will only be installed in the SC/PC format defined in this document – 'special requests' for particular cable or connector types cannot be accommodated.

**TEMPORARY GENERAL AUTHORIZATION BY ASSIGNMENT OF
INDIVIDUAL RIGHTS TO USE FREQUENCIES**

August 1, 2003 Decree n. 259 and s.m. - Electronic Communications Code

**AL MINISTERO DELLO SVILUPPO ECONOMICO
DGSCERP**

Direzione generale per i Servizi di Comunicazione Elettronica, di
Radiodiffusione e Postali

DIVISIONE II -

Comunicazioni elettroniche ad uso pubblico e privato. Sicurezza delle
reti e tutela delle comunicazioni

frq.temp@mise.gov.it

the undersigned

Surname

Name

Applicant

Company name

City

address

Nation

Indicate the name of the Company which use frequencies (if different from applicant)

request the general authorization with temporary grant of right of use of frequencies
for event

location, city, address where the frequencies will be used

from

to

Person to contact

e-mail

Person to contact on site

Tel.

e-mail

Tel.

data

firma

TECHNICAL DATA SHEET										
Applicant		request period of use		User frequencies		place of the event				
name event		start date:		finish date:						
FILL ONE DATA SHEET FOR EACH RADIO LINK										
FREQUENCY OR PAIR OF FREQUENCIES MHz	bandwidth KHz	operation mode (°)	type of transmission (°)		type radio station (°)	TX	RX	nr. devices	coordinates (#)	length of the link Km (##)
		SP	Audio							
		DP	Video		Mobile					
		UNI	Microphones		Handle					
		SDP	Data		Fixed					
					Aircraft					
					Repeater					
ALTERNATIVE FREQUENCIES										
	by every type of radio station									
	SP Channel 1 frequencies				radio station		power	band (°°)	modulation	
	DP Channel 2 frequencies									
	SDP Channel 2 frequencies with repeater									
	UNI channel unidirectional									
	Audio LB (wideband EN 300 454)									
	Wireless microphones (up to 50 mW ERP) complying with									
	the ETSI EN 300 422 - unlicensed bands (does not indicate frequency)									

(°) select box

(°°) specify operating frequency range

(#) enter the coordinates of fixed stations Radio. If there are not fixed stations specify the coordinates of the center in a hypothetical circular area in which they operate.

(##) If there is at least one fixed station, specify the maximum length of radio link. If the are not fixed station, specify the radius of the hypothetical circular area in which they operate

**TEMPORARY GENERAL AUTHORIZATION FOR THE USE OF WIRELESS
MICROPHONES SHORT RANGE DEVICES**

August 1, 2003 Decree n. 259 and s.m. - Electronic Communications Code
(art. 104, comma 1, lett c, punto 2.3- art.112, comma 3)

Al Ministero dello Sviluppo Economico
DGSCERP Direzione generale per i Servizi di
Comunicazione Elettronica, di Radiodiffusione e Postali
Divisione II - Comunicazioni elettroniche ad uso
pubblico e privato. Sicurezza delle reti e tutela
delle comunicazioni
frq.temp@mise.gov.it

the undersigned:

Surname

Name

Applicant

Company name

City

address

Nation

Indicate the name of the Company which use frequencies (if different from applicant)

request the temporary general authorization for the use of n. ____ radio microphones (up to 50 mW ERP) complying with the ETSI EN 300 422 with the technical characteristics (brand -type - ERP power - tuning range - bandwidth – serial number) indicated on page 2;

for event

location, city, address where the frequencies will be used

from

to

Person to contact

e-mail

Tel.

Person to contact on site

e-mail

Tel.

date

signed

[illegible]



Electrical Checklist for Broadcasters

UEFA Club Competition Finals & Nations League Finals

UEFA Events SA – Technical Services Department

Electrical Checklist for Broadcaster – UEFA Club Competition finals & Nations League Finals

Dear Broadcast Partner,

You will soon be having a production onsite for a UEFA Club Competition Final or a Nations League Final. In order to provide you with the best possible service level on power supply, the Technical Services Department of UEFA follows a strict electrical concept that includes all OB-vans at the TV Compound.

The most important goal of this concept is to create a safe working environment for all staff working on the event.

Furthermore, UEFA is providing a high quality redundant power source, following the “one venue, one earth” concept to reduce error sources and EMC disturbances as much as possible.

Please note, that UEFA will not risk the success of this concept and refuse signal connectivity if your truck is not connected to the common power source.

We would like to point out, that

- Due to the international character of this tournament all broadcasters have to follow the common basis for electrical design for mobile broadcasting units that has been defined as “IEC 60364-7-717: 2009 – Requirements for special installations or locations – Mobile or transportable units”.

Please note that this is not an UEFA requirement, but an international standard UEFA is referring to as common sense for electrical and operational safety. It is the responsibility of each owner / operator of broadcasting vehicles to comply with this standard.

The practical implementation of this standard as decision flow chart during UEFA Events is attached to this document.

The latest version of this standard is available under the following link:

<https://webstore.iec.ch/publication/1904>

- Using your own generator as power supply during your production on any of the UEFA TV Compounds will not be allowed.

We would like to get prepared for your arrival on site. Therefore, we ask you to fill in the below form sign it and send the scanned copy back to

uclfpower@uefa.ch	for UEFA Champions League Finals
uelfpower@uefa.ch	for UEFA Europa League Finals
ueclfpower@uefa.ch	for UEFA Conference League Finals
uscpower@uefa.ch	for UEFA Super Cup
unlfpower@uefa.ch	for UEFA Nations League Finals

Electrical Checklist for Broadcaster – UEFA Club Competition finals & Nations League Finals

Please note that the following documentation will be required to be submitted as well:

- Electrical single line diagrams of the vehicle(s) you intend to use on UEFA TV Compounds in accordance with IEC 60364-5-514.5 "Selection and erection of electrical equipment – Common rules"
The latest version of this standard is available under the following link:
<https://webstore.iec.ch/publication/1876&preview=1>
- A valid (not older than 12 month) certification for each of your vehicles you intend to use on UEFA TV compounds in accordance with the above-mentioned IEC 60364-7-717. Any measurements as part of this certification shall be in accordance with IEC 60364-6 "Verification".

Such certifications can be arranged in cooperation with international accredited testing institutes, such as:

DEKRA Automobil GmbH **Niederlassung Frankfurt/Main**

Mr. Christian Decker

Borsigallee 24B
D-60388 Frankfurt am Main
Tel.: +49 69 42083-332
Fax: +49 69 42083-400
Mobil: +49 151 406 568 17
Email: iec.test@dekra.com
www.dekra.com

Please note that UEFA has no arrangement in place with DEKRA (i.e. any testing is for broadcasters to agree with DEKRA, as well pay for). Further this is not a recommendation by UEFA and there is no obligation to use DEKRA. UEFA cannot be involved in the testing process.

Should you have any further question, please do not hesitate to contact us via the event specific email address.

We are looking forward to welcome you on site!

Technical Services Department

Electrical Checklist for Broadcaster – UEFA Club Competition finals & Nations League Finals

Broadcaster:

Technical Provider:

Vehicle license plate:

License plate

Type of vehicle: OB van / SNG / equipment truck / others:

Truck Type

Connection	Power	Requested*
3 phase , 5 pin 400/230 V, 50 Hz	CEE 32 A	☐
	CEE 63 A	☐
	CEE 125 A	☐

1 phase , 3 pin 230 V, 50 Hz	CEE 16 A or Schuko	☐
	CEE 32 A	☐
	CEE 63 A	☐
	CEE 125 A	☐

***Please ensure the power requested above matches the power requested in FAME**

Power Rating of the Vehicle	
	kW
	kVA

Electrical Checklist for Broadcaster – UEFA Club Competition finals & Nations League Finals

Responsible contact person on vehicle during event:

Name:

E-mail Address

e-mail

Phone Number

phone number

The undersigned hereby states that the OB van which will be present at the UEFA TV compound will follow the attached "TV Compound Vehicle Power Connection Flow Chart" correctly with an outcome of a positive result when connecting to the TV compound technical power.

Date

dd/mm/yyyy

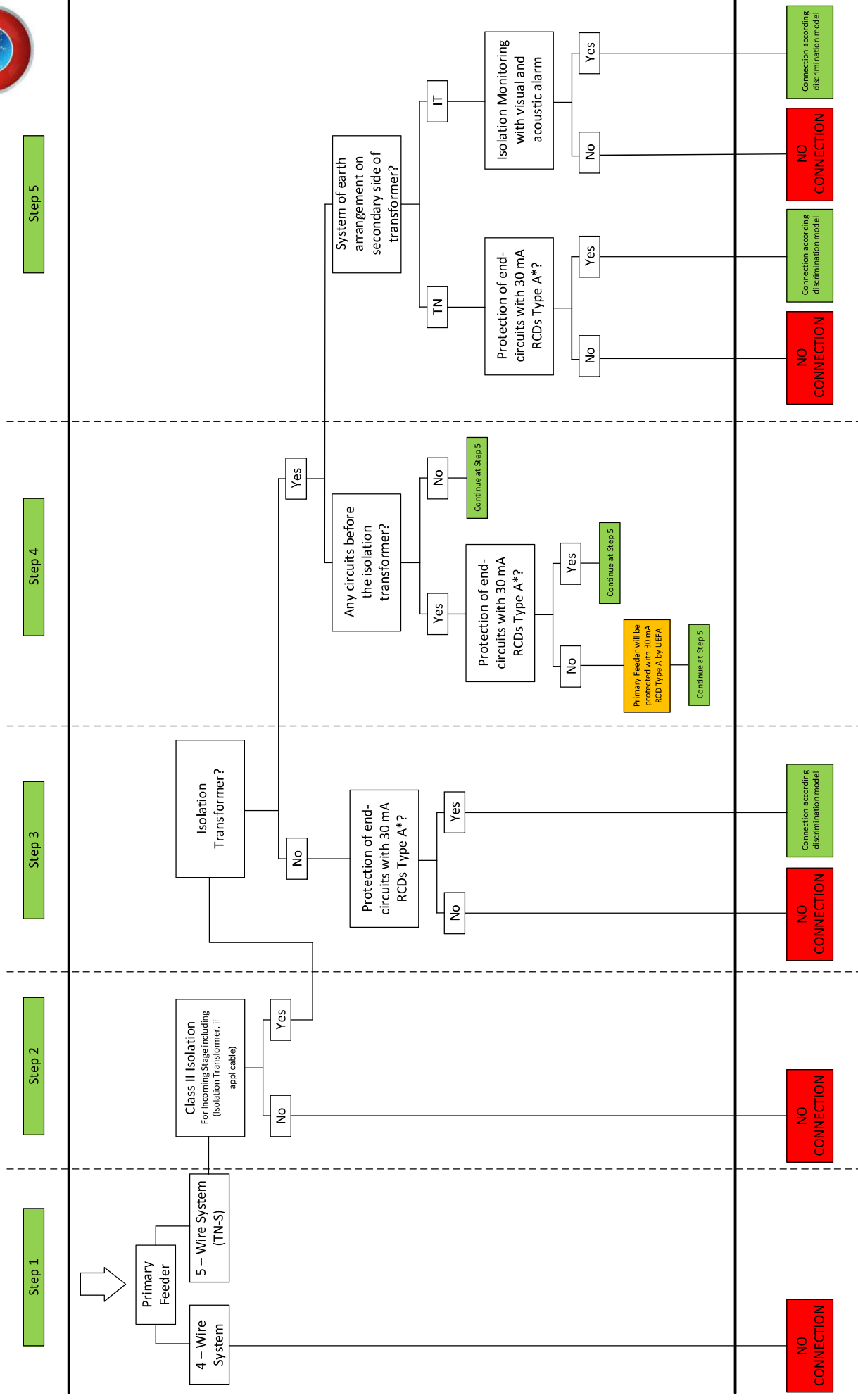
Signature



UEFA
ROUTE DE GENÈVE 46
CH-1260 NYON 2
SWITZERLAND
TELEPHONE: +41 848 00 27 27
TELEFAX: +41 848 01 27 27
UEFA.com UEFA.org

WE CARE ABOUT FOOTBALL

TV Compound Vehicle Power Connection Flow Chart



* RCD Type AC is not permitted!