

## Section 5a: Schedule of Requirements and Technical Specifications/Bill of Quantities

---

### Lot 1

#### Visualization - LED Screens for Conference Rooms in Langer Eugen

##### Background:

The United Nations Campus in Bonn is home to 19 UN organizations, agencies, and convention secretariats, in their entirety referred to as UN Bonn. Sharing the same buildings gives opportunity to also share certain facilities and support services while gaining efficiencies and saving costs. Besides the joint management of the premises, central ICT infrastructures, and central services such as safety and security, mail logistics, language services, system-wide surveys, and host country liaison, also the dedicated conference facilities are provided to the organizations on a common basis.

Currently several conference and meetings rooms are on the UN Bonn campus which are fully equipped with Conference-, Audio- and Video technology. The rooms are categorized in different rooms types according to the capacity of the room.

##### Objective:

Purchase of a total of 3 LED Display Units, including all installation services, for mid-size conference rooms in the Langer Eugen building.

The services must include necessary configuration, installation works, as well documentation and warranty.

Room Type	High-ceiling - mid-size conference room up to 50 Participants
	Room 2112 – 21 <sup>st</sup> floor in Langer Eugen
	Room 2116 – 21 <sup>st</sup> floor in Langer Eugen
	Room 2716 – 27 <sup>th</sup> floor in Langer Eugen

##### Scope of Work and Service Description

The selected offeror of the competitive bidding will need to deliver both, delivery of the equipment as well as installation works.

The offeror must submit technical specification and financial offer to UNV for installation of the required item and services. This shall include at the minimum the following components.

- All required services, including but not limited to installation, set up, training and warranty services

- Any pre-installation requirements are to be stated clearly by the offeror and need to be verified jointly by the offeror and UNV.
- Additional materials and items required for installation a timebound project implementation plan.

Any equipment, fitting, material, software or supplies which may not be specifically mentioned in the specifications but which are necessary for carrying out the contract works within the scope of the tender are to be provided for and rendered by the offeror.

- Such items not quoted by the offeror must be supplied at no extra charge by the offeror.
- The offeror shall ensure that migration from the current setup to new setup is done in such a way so that existing operation of conference technology and business continuity is not affected. The migration needs to be planned in a phased and well-planned manner to achieve minimum downtime and constant business continuity.
- Testing and user training need to be carried out on-site.
- The offeror shall submit a project completion report once the installation is established, including full documentation, user manual, customized software code (if applicable), as well as maintenance plan and warrant provisions.

#### Technical Requirements

Based on room size, conference layout and building restrictions, the LED Display Unit must fulfill the following technical specifications,

- 130" LED All in one single Display Unit (no video wall system), non-glare display
- The resolution needs to be Full HD (1920x1080px), with brightness of 800cd/m<sup>2</sup> after calibration maximum; Pixel pitch minimum 1,5 mm or less (< 1,5 mm)
- Viewing angle 178°/178°
- Installed on an electrically height adjustable stand (height of the lower edge of the display should be adjustable from 1000 mm to 1400 mm), since mounting the unit to the walls or ceiling is not possible. Floor plate size of max 850 mm depth and max 1900 mm width. The maximum floor load of 500kg/ sqm cannot be exceeded
- Power consumption; one plug 230 V with max. capacity of 16A (incl. electrically high adjustable stand)
- The Unit must be easily full controllable by the end user via a provided IR Remote control

- The LED Unit needs to be front serviceable. The needed tools should be included and stored on site
- Also include at least one full Cabinet of spare parts (panel) per Display Unit, which need to be stored on site for service purposes
- The LED unit needs to feature the following input options: 2x HDMI, 1x DP, 2x USB for integrated Media Player
- The provided warranty should cover 5 years on all non-wear parts.

#### Logistical Note

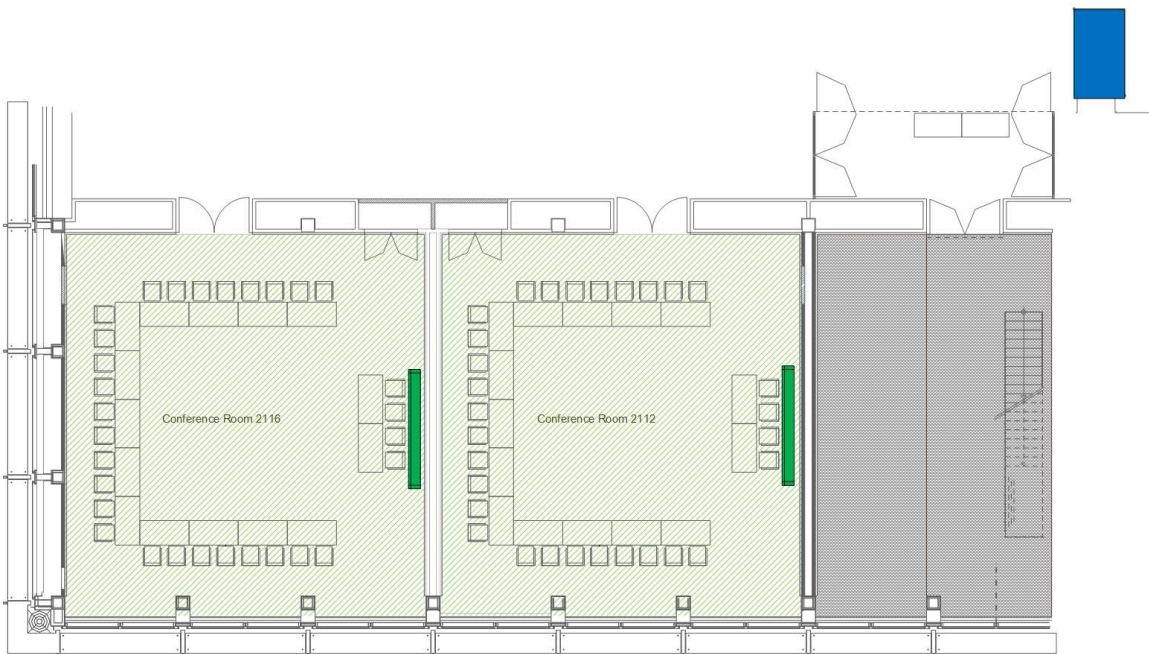
Due to the limited elevator space, the Unit might have to be delivered in partitions or segments, not exceeding more than 2,5m x 1,38m x 1,99m (L x W x H). Planning of delivery and of final set up needs to be performed by manufacturer trained, qualified and duly authorized technician.

Delivery and installation of the system should be completed in January 2019, at the latest before 01 February 2019.

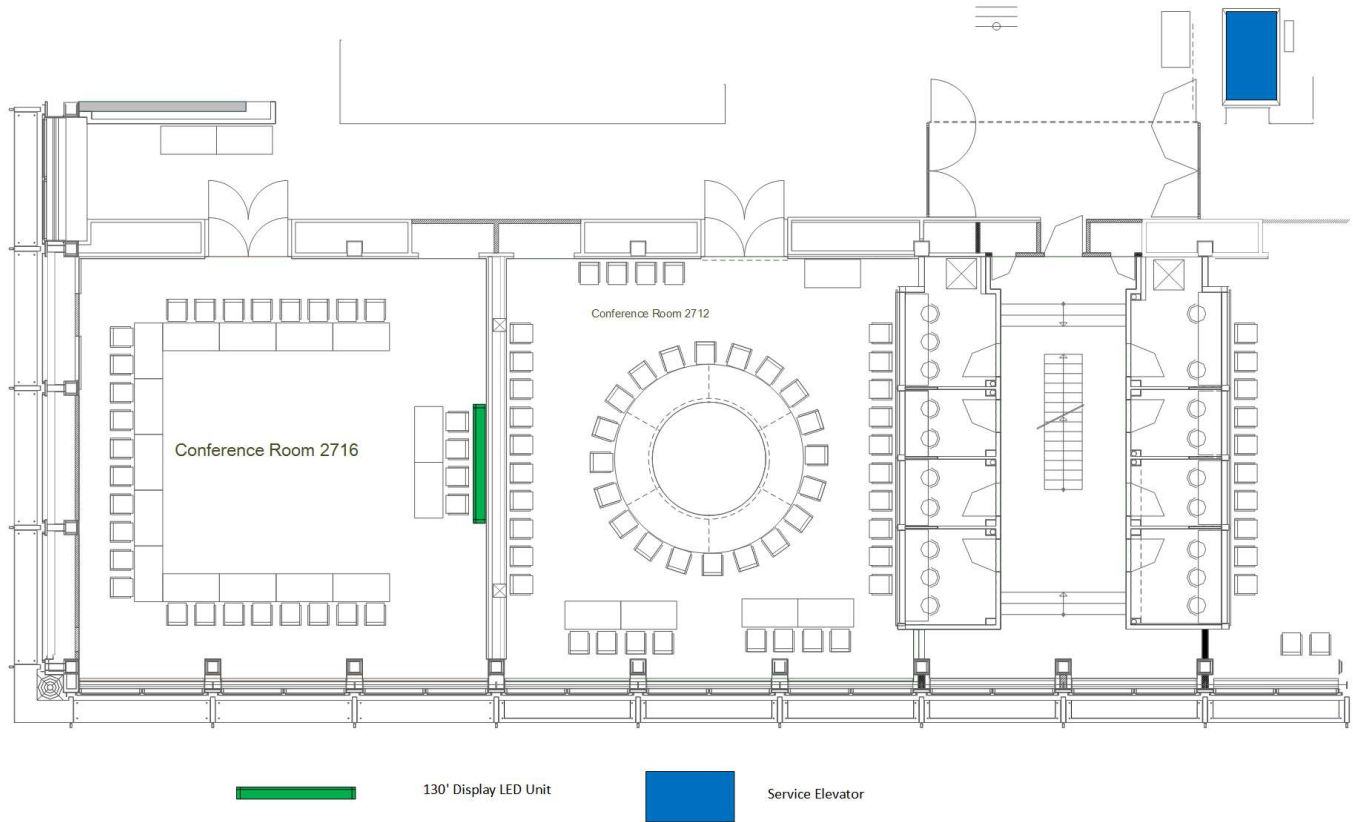
#### Attachment

Floor plan - 21st floor in Langer Eugen

## **UN Campus / Langer Eugen Floor Plan 21<sup>st</sup> - floor**



# UN Campus / Langer Eugen Floor Plan 27th - floor



## Lot 2

Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>SDI Distributer</b>	<b>Blackmagic Mini Converter SDI / HD-SDI / SDI Distribution</b> Connections 1 x SDI Video Input. Switchable between SD, HD and 3G-SDI. SDI Video Outputs 8 outputs automatically match the SDI video input. Multi Rate Support Auto detection of SD, HD or 3G-SDI. SD Video Standards 525i59.94 NTSC, 625i50 PAL	10	28 Jan - 01 Feb 2019
2	<b>SD / HD Converter</b>	<b>Blackmagic Mini Converter SD/HD UpDownCrossHD</b> Connections SDI Video Inputs 1 x SD, HD or 3G-SDI Video Input and 1 x External Reference Input. HDMI Video Input 1 x HDMI type A connector. SDI Video Outputs 1 x loop out and 2 x outputs HDMI Video Output HDMI type A out. Output supports EDID of the monitor. Output supports EDID of the monitor.	6	28 Jan - 01 Feb 2019
3	<b>Analog to SDI</b>	<b>Blackmagic Mini Converter Analog to SDI</b> Connections SDI Video Outputs 2 x SDI Video Outputs. Analog Video Inputs NTSC, PAL, S-Video and Component SD/HD input. Digital Audio Inputs 2 channels of balanced AES/EBU audio. Multi Rate Support Auto detection of SD or HD. Updates and Configuration Via USB 2.0 high speed. (480 Mb/s)	3	28 Jan - 01 Feb 2019
4	<b>SDI/HDMI</b>	<b>Blackmagic Design Micro Converter BiDirectional SDI/HDMI</b> Converts SDI to HDMI & HDMI to SDI; Simultaneous Conversions 1 x Input & 1 x Output SD/HD/3G-SDI; 1 x Input & 1 x Output HDMI Converts up to 1080p60; Automatic Input Signal Detection SDI Reclocking; Micro-USB Power; AC Power Supply Included	6	28 Jan - 01 Feb 2019
5	<b>MultiView</b>	<b>Blackmagic Design MultiView 4</b> SDI video inputs 4 x 10-bit SD-SDI, HD-SDI and 6G-SDI SDI video outputs 4 looped, 1 HD / Ultra HD SDI rates 270 MBit; 1.5 G; 3G; 6G SDI video outputs for multi-display 1 x 10-bit HD-SDI and 10-bit 6G-SDI	4	28 Jan - 01 Feb 2019

Ref.	Item	Specifications	Quantity	Delivery Date
		HDMI video outputs for multi-display 1 HDMI Type A connector output supports the monitor's EDID data.		
6	<b>SSD Rekorder</b>	<b>Blackmagic HyperDeck Studio Pro</b> SDI video inputs 1 entrance SDI video outputs 4 outputs, single link or quad link SDI rates 270 Mbps; 1.5 G; 3G; 6G HDMI video inputs 1 HDMI socket type A including support for Ultra HD 4K HDMI video outputs 1 HDMI socket type A including support for Ultra HD 4K Analog video inputs Y, B-Y, R-Y Analog video outputs Y, B-Y, R-Y	8	28 Jan - 01 Feb 2019
7	<b>Docking Station</b>	<b>Dual Docking Station SATA HDD</b> Support-Typ: 3,5 / 2,5 Zoll SATA-I / II / III-Festplatte und SSD (Solid State Disk) Produktschnittstelle: USB3.0 Übertragungsrate: USB3.0-Unterstützung für 5Gbps, USB2.0-Unterstützung für 480Mbps Systemunterstützung: für Windows 2003 / XP / Vista / für Win7 / für Win8.X / für Win10, für MAC 10.3 oder höher, für Linux	2	28 Jan - 01 Feb 2019
8	<b>SSD</b>	<b>Samsung SSD 860 Pro Series</b> 1TB SATA 6Gb/s, 6,4cm(2,5") 376,55 376,55	18	28 Jan - 01 Feb 2019
9	<b>Monitor Bridge</b>	<b>Blackmagic SmartView DuoSmartView</b> SDI video inputs Automatically switches between SD, HD and 3G-SDI signals. Reclocked loop-through output Multi-rate support Automatic recognition of 2K, HD or SD inputs Updates and configuration About USB 2.0 High Speed (480 Mbps) Ethernet network 10/100 BaseT with through-sand filter	8	28 Jan - 01 Feb 2019

**Lot 3**

Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>Video Prozessor</b>	<b>Analog Way Vio4k</b> Video Processing ToolBox VIO 4K at a glance: The "All in One" solution for any conversion User-friendly and Intuitive Graphic interface Diverse selection of option cards for video and audio system expansion Advanced LED Wall functionalities Ultra-low latency 10-bit processing 4:4:4 New exclusive high-quality scaling engine	4	28 Jan - 01 Feb 2019
2	<b>Remote Controller</b>	<b>Analog Way RK-350 Remote Control</b>	4	28 Jan - 01 Feb 2019
3	<b>Video Controller</b>	<b>Analog Way - Orchestra2 - ORC50</b> Simultaneously control up to 6 projections with single projection or softedge store up to 64 presets per screen selection Controls a variety of Seamless Switchers from Analog Way Off-line Programming Snap Function Equipped with a USB port - the full event configuration can be saved for future use	1	28 Jan - 01 Feb 2019

#### Lot 4

Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>Audio Recorder</b>	<b>Denon DN-700R</b> 19", 1HE, Player: WAV/AIFF/AAC MP3, Rec.: WAV/MP3, SD/SDHC Slot, USB	8	28 Jan - 01 Feb 2019
2	<b>Audio Interface</b>	<b>Yamaha DANTE-MY16-AUD2</b> AUDINATE INTERFACE CARD	4	28 Jan - 01 Feb 2019
3	<b>Microphone</b>	<b>Table top Microphone</b> <b>AKG CGN 521 STS</b>	8	28 Jan - 01 Feb 2019
4	<b>Headset</b>	<b>DPA 4066 F Headset EW Bundle</b> Headset microphone Directivity: sphere removable neckband adjustable for right and left application for wireless transmitters with B + K plug (optional adapter for almost all transmitters available) Color beige DPA DAD6034 adapter for Sennheiser EW series	6	28 Jan - 01 Feb 2019
5	<b>Audio Loudspeaker</b>	<b>Neumann KH 120 A</b> Active 2-way studio near-field monitor Equipment: 5.25 "woofer + 1" tweeter Frequency range: (+/- 3 dB): 52 Hz - 21 kHz Maximum level: 112.2 dB SPL Power: 50W woofer and 50W tweeter	4	28 Jan - 01 Feb 2019
6	<b>Pocket Transmitter</b>	<b>Sennheiser EK 100 G3-B</b> 1680 UHF frequencies selectable within 42MHz bandwidth 20 fixed frequency banks with up to 12 compatible preset frequencies + 1 bank with recordable frequencies Adaptive diversity technology for high reception quality Pilot tone squelch for trouble-free operation Scan function to find free receiving channels delivery <ul style="list-style-type: none"> <li>• 1 diversity receiver EK 100 G3</li> <li>• 1 hot shoe adapter CA 2</li> <li>• 1 jack cable CL 1</li> <li>• 1 XLR cable CL 100</li> <li>• 2 batteries</li> </ul>	6	28 Jan - 01 Feb 2019



**Lot 5**

Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>Touch Panel</b>	<b>Crestron TS-1542-TILT-B-S</b> 15.6" HD Touch Screen, Tabletop Tilt, Black Smooth Incl. table top	1	28 Jan - 01 Feb 2019
2	<b>Touch Panel</b>	<b>Crestron TSW-760-B-S &amp; TSW-760-TTK-B-S</b> 7" Touch Screen, Black Smooth <b>incl. table top TSW-760-TTK-B-S</b>	4	28 Jan - 01 Feb 2019
3	<b>DM - A/V Switcher</b>	<b>Crestron DM-MD16X16</b>	1	28 Jan - 01 Feb 2019
4	<b>Digital Media Card Chassis</b>	<b>Crestron DMF-CI-8</b> Incl. DigitalMedia™ 4K60 4:4:4 HDR Network AV Encoder/Decoder Card	4	28 Jan - 01 Feb 2019
5	<b>Digital Media</b>	<b>Crestron DM-NVX-350</b> DigitalMedia™ 4K60 4:4:4 HDR Network AV Encoder/Decoder	8	28 Jan - 01 Feb 2019
6	<b>HDMI Splitter</b>	<b>Crestron HD-DA2-4K-E</b> 1-to-2 4K HDMI® Distribution Amplifier	14	28 Jan - 01 Feb 2019
7	<b>Video Transmitter</b>	<b>Crestron HD-TX-101-C-E</b> DM Lite – HDMI® over CATx Transmitter	10	28 Jan - 01 Feb 2019
8	<b>Video Receiver</b>	<b>Crestron HD-RX-101-C-E</b> DM Lite – HDMI® over CATx Receiver	10	28 Jan - 01 Feb 2019
9	<b>Network Switch</b>	<b>Crestron CEN-SW-POE-5</b> 5-Port PoE Switch	5	28 Jan - 01 Feb 2019
10	<b>A/V Interface Card</b>	<b>Crestron Input Card HDBT for modular Matrix Frame DM-MD</b> <b>DMC-4K-C-HDCP2</b>	3	28 Jan - 01 Feb 2019
11	<b>A/V Interface Card</b>	<b>Crestron Input Card HDMI for modular Matrix Frame DM-MD</b> <b>DMC-4K-HD-HDCP2</b>	13	28 Jan - 01 Feb 2019
12	<b>A/V Interface Card</b>	<b>Crestron Output Card HDBT</b> 2Ch. Output Card for modular Matrix Frame DM-MD <b>DMC-4K-CO-HD-HDCP2</b>	2	28 Jan - 01 Feb 2019
13	<b>A/V Interface Card</b>	<b>Crestron Output Card HDMI</b> 2Ch. Output Card for modular Matrix Frame DM-MD <b>DMC-4K-HDO</b>	6	28 Jan - 01 Feb 2019

**Lot 6**

Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>Wireless A/V transmitter</b>	<b>Barco ClickShare CSE-800 Pack EU</b> Laptops and Tablet PC with only one Push of a button, wireless with the video technology of the Conference room. Several participants can do theirs Show a presentation with a click and so on just like never sharing content.- up to 4 participants simultaneously displayable (split screen) on one Display- up to 8 participants can be displayed simultaneously (Split screen) on two displays- max. Output resolution: 4,096x2160 pixels (4K DCI) - max. Input resolution: 4,096x2160 pixels (4K DCI) - 2x HDMI OUT- 2x HDMI IN- up to 64 participants (ClickShare Buttons) expandable - No installation ClickShare CSE-800 Pack EU Lieferumfang: 1x	4	28 Jan - 01 Feb 2019
2	<b>Wireless A/V transmitter</b>	<b>Barco ClickShare ClickShare CSE-200 Pack EU</b> ClickShare CSE-200 Pack EU ClickShare connects Laptops and Tablet PC with only one Push of a button, wireless with the video technology of the Conference room. Several participants can do theirs Show a presentation with a click and so on just like never share content.- max. Output resolution: 1,920 x 1200- up to 16 Participants (ClickShare Buttons) expandable- None Installation or Admin rights necessary Manufacturer - Warranty: 3 years (Selective Sales: Sales only with valid Barco Connect partnership)	8	28 Jan - 01 Feb 2019
3	<b>Wireless Remote Control</b>	<b>Dsan Perfect Cue Mini, Cue Light System</b> including transport case, USB connection cable, Plug-in power supply (12V / 2A) and a remote control by choice Range about 50m	8	28 Jan - 01 Feb 2019
4	<b>Ceiling mount</b>	<b>Peta - STANDARD Projector ceiling mount</b> PETA 100.001.070-130 Incl. adapter plate Barco Projektion (BARCO) F90-4K13	1	28 Jan - 01 Feb 2019
5	<b>Projector</b>	<b>Barco Projektion (BARCO) F90-4K13</b> 1-chip DLP laser phosphor projector, 4K resolution 3.840x2.400	1	28 Jan - 01 Feb 2019
6	<b>Lense for Projector</b>	<b>Barco Lense for F90-4K13</b> FLD+ 1.7 – 2.5 : 1 (EN41) (R9801216)	1	28 Jan - 01 Feb 2019
7	<b>Noise protection case</b>	<b>Vicom SSG17</b> Vicom Soundproof Housing Custom Made Barco F90 <b>including sled</b>	1	28 Jan - 01 Feb 2019
8	<b>Wireless Remote Control</b>	<b>Logitech Spotlight Presenter</b> Dual connection - connect the logitech spotlight presentation remote via the usb receiver or the bluetooth low energy technology • 30 meter range - you can move freely in the room up to 30 m away for medium to large rooms • Requires installation of the logitech presentation software	8	28 Jan - 01 Feb 2019

**Lot 7**

Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>Headphones</b>	<b>Bosch LBB3443/00</b> Lightweight stereo headphones, 50 - 20 kHz, 3.5 mm	300	28 Jan - 01 Feb 2019
2	<b>Camera control</b>	<b>Bosch KBD-DIGITAL</b> Video Keyboard for DIVAR 5000   Display of all Operating functions via LCD display   3m cable to Connection included   Power supply via DVR   when used with decoders or PCs 12V Supply voltage separately <b>Incl. RS 232 adapter to USB</b>	4	28 Jan - 01 Feb 2019
3	<b>Bosch Gooseneck</b>	<b>Bosch LBB3549/50</b> Plug-in microphone with long gooseneck. Packing unit 2 pieces	60	28 Jan - 01 Feb 2019
4	<b>DCN Unit</b>	<b>CCS 1000 D Diskussions System</b> Bosch CCSD-CURD CCS 1000 D central unit with DASS and Recording function - automatic digital Feedback Cancellation	2	28 Jan - 01 Feb 2019
5	<b>Microphones</b>	<b>Bosch CCSD-DS</b> CCS 1000 D delegate table microphone (short), compact device, microphone with gooseneck (310mm), light ring, speaker, headphone jack with volume control, "speaking possible" display.	20	28 Jan - 01 Feb 2019
6	<b>Cable</b>	<b>Bosch LBB4116/5</b>	4	28 Jan - 01 Feb 2019

**Lot 8**

Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>A/V Switcher</b>	<b>Lightware MX12x12DVI-Plus</b> 20 meters input cable compensation, Advanced EDID management, RS-232 and IP control, Ruggedized Ethernet connector; built in front panel button control, Built in power supply.	4	28 Jan - 01 Feb 2019
2	<b>A/V Switcher</b>	<b>Lightware MX2-8x8-HDMI20</b> The MX2-8x8-HDMI20-Audio HDMI2.0 standalone matrix switcher uncompromised 4K UHD resolution 60Hz 4:4:4. 8 HDMI2.0 inputs and 8 HDMI2.0 outputs transmitting up to 4K at 60Hz in 4:4:4 format, while supporting 3D, Dolby TrueHD and DTS-HD Master Audio.	7	28 Jan - 01 Feb 2019

**Lot 9**

Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>Preview Screen</b>	<b>Samsung Smart Signage PM49H</b> Diagonal: 124,26cm / 49 ", S-PVA panel, resolution: 1920x1080, brightness: 500cd / m <sup>2</sup> , contrast: 4000: 1 (static), reaction time: 8ms, viewing angle: 178 ° / 178 °, VESA: 400x400, loudspeaker 2x 10W, extended Connection options (2x DP v1.2, 2x HDMI, DVID, 15pin D-Sub, RS-232C via RJ-45 and 3.5mm Jack, DP Loop Out supports HDCPS Signal Forwarding	10	28 Jan - 01 Feb 2019
2	<b>Display stands</b>	<b>Chief Confidence monitor cart MFQU black</b> With universal mounting bracket for 30-55 inches Displays, tilttable: + 15 ° / + 45 ° Carrying capacity: 56,7 kg, VESA grid 100 x 100 - 709 x 431 mm	10	28 Jan - 01 Feb 2019
3	<b>Interactive Screen</b>	<b>Samsung FLIP WM55H LED Monitor</b> Diagonal Size 55 Type 60Hz E-LED Resolution 3840 x 2160 (Landscape) 2160 x 3840 (Portrait) Brightness(Typ.) 300 (without glass), 220 (with glass) nit Contrast Ratio 4700:01:00 Viewing Angle(H/V) 178:178 Response Time(G-to-G) 8ms(Typ.)	8	28 Jan - 01 Feb 2019
4	<b>Stand for Samsung FLIP</b>	<b>Samsung STN-WM55H</b> Dimension (mm) Set 1023 X 1611 X 991 Package 1682 X 221 X 1038 Color Light Gray VESA Mount (mm) Connectivity HDMI 1 / Touch Out 1 / RJ45 1 /Power 1	8	28 Jan - 01 Feb 2019
5	<b>Monitor Screen</b>	<b>Samsung Smart Signage QM55H</b> Non glare panel Diagonal: 138.7cm / 54.6 ", S-PVA Panel (Haze 25%), Resolution: 3840x2160, Brightness: 500cd / m <sup>2</sup> , Contrast: 4000: 1 (static), response time: 8ms, viewing angle: 178 ° / 178 °, VESA: 400x400, loudspeaker 2x 10W, extended connection options (DP In, 2x HDMI In, DVI In, 2x USB, Stereo Mini Jack, Black, central infrared sensor, IP5X certification, SoC, SSSP 5.0 (LH55QMHLPGC / EN)	4	28 Jan - 01 Feb 2019
6	<b>Monitor Screen</b>	<b>Samsung QM75F</b> Edge-Lit 4K UHD LED Display, non glare panel Display Screen Size 75" Panel Technology 60Hz E-LED BLU Resolution 3840x2160 Aspect Ratio 16:9 Brightness 500nit Contrast Ratio (Typical) 4000: Viewing Angle (H/V) 178/178 Connectivity Input RGB: DVI-I(D-Sub Common), Display Port 1.2 (2) (Support UHD 60hz)	4	28 Jan - 01 Feb 2019

Ref.	Item	Specifications	Quantity	Delivery Date
		VIDEO: HDMI 1.4 (4) HDCP: HDCP1.4 (support UHD 30hz) AUDIO: Stereo mini Jack, RGB, DVI, HDMI USB: (S/W update only) Output Audio: Stereo Mini Jack External Control		
7	<b>Digital Poster screen</b>	<b>Viewsonic EP5520T</b> Screen size 55 inches / 139.7 cm Resolution 1920 x 1080 / Full HD Panel / viewing angle SuperClear®VA / 178/178 degrees Operating time (max) 16/7 - 16 hours / day, 7 days / week Connectivity 2x HDMI / 3x USB-Down / VGA Brightness 350 cd / m <sup>2</sup> Speaker 2x 10 watts Warranty 3 years Pick Up, Repair, Return Special feature Freestanding design, Interactive on-demand messaging, Internal Scheduler, IR Pass-Through, Integrated quad-core media player with 16 GB of memory	4	28 Jan - 01 Feb 2019
8	<b>Monitor Stand</b>	<b>Kindermann VST-D Motor 120 4008 000 003</b> roller stand Display stand, manual height adjustable, <b>incl. camera shelf plus notebook shelf</b> Display stand, electric motor height adjustable, can be hung on the wall, in the corner or in the middle of the room to be placed. Inside, in addition to the power and data lines a mini PC integrate. <ul style="list-style-type: none"> <li>• Removable back panel with top and bottom vents</li> <li>• Stroke: approx. 60 cm, lifting capacity: 120 kg</li> <li>• Display holder according to VESA standard 100 x 100 to 800 x 400</li> <li>• Cable management inside the column and integrated mount for Mini PC with VESA 100 x 100</li> <li>• Cable outlets at the back and bottom of the removable rear panel</li> <li>• Powder coated sheet steel, column gray aluminum, RAL 9005, glossy</li> <li>• Dimensions: 180 x 131 x 78 cm (HxWxD)</li> <li>• Roller stand: with 4 swivel castors (diameter approx. 80 mm), 2 of them lockable</li> </ul>	4	28 Jan - 01 Feb 2019
9	<b>Monitor Bridge</b>	<b>Marshall M-LYNX-503</b> Triple 5 Zoll screen Rackmountable with HDMI, 3G-SDI, Composite	8	28 Jan - 01 Feb 2019
10	<b>Monitor Display</b>	<b>ViewSonic Display VX2276-SMHD</b> VIEWSONIC VX2276-SMHD 54.61 cm (21.5 ") SuperClear® IPS LED, 1920 x 1080, 16: 9, 250cd / m <sup>2</sup> , 4ms, tilt, 80,000,000: 1 dynamic contrast, 178 ° / 178 °, 1x VGA, 1x DP, 1x HDMI, integrated speakers (2x3 W)	4	28 Jan - 01 Feb 2019

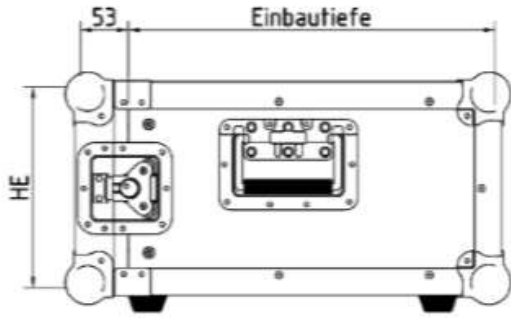
Ref.	Item	Specifications	Quantity	Delivery Date
11	<b>Monitor Display</b>	<b>LG 24UD58-B</b> display type 4K TFT-LCD Active Matrix with White LED Backlight screen size 60.45 cm / 23.8 " Active screen 558.02 mm x 232.51 mm pixel configuration RGB stripes Wide Technology AH-IPS (Advanced High Performance In Plane Switching) surface treatment Hard Coating (3H) Anti-glare	4	28 Jan - 01 Feb 2019

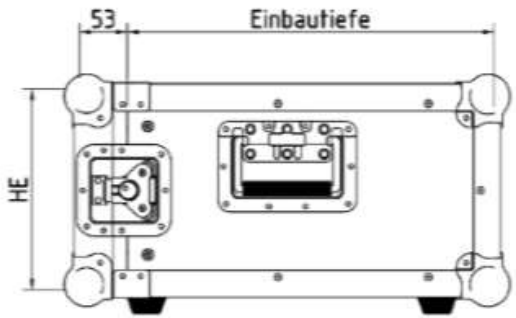
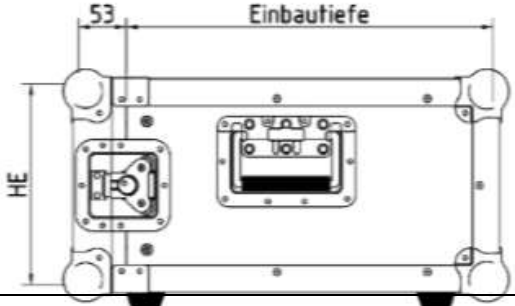
**Lot 10**


Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>Projector Lamp</b>	<b>Panasonic ET-LAD60W</b> Original projector lamp ET-LAD60W, lamp set (PU: 2 pieces)	8	28 Jan - 01 Feb 2019
2	<b>Projector Lamp</b>	<b>Panasonic ET-LAD120W</b> Original projector lamp ET-LAD120W, lamp set (PU: 2 pieces)	4	28 Jan - 01 Feb 2019
3	<b>Cable defender</b>	<b>Adam Hall</b> Defender Nano BLK Cable bridge 6 channels with black cover	6	28 Jan - 01 Feb 2019
4	<b>Cable defender</b>	<b>Adam Hall</b> Defender Office GREY Non-slip ultra-flat cable bridge	80	28 Jan - 01 Feb 2019
5	<b>Monitor table stand</b>	<b>Dataflex Viewmaster</b> <ul style="list-style-type: none"> <li>• Color: Black</li> <li>• Stepless height adjustment</li> <li>• Integrated / hidden cable management</li> <li>• For 4 monitors</li> <li>• Adjustable height</li> <li>• Parts made of die-cast aluminum</li> <li>• VESA mount MIS-D 75x75 and 100x100mm compatible</li> <li>• Rotatable 360 °</li> <li>• inclinable + 55 ° / -55 °</li> <li>• swiveling + 90 ° / -90 °</li> <li>• Pillar height 355 mm</li> <li>• Load capacity max. 12 kg per monitor</li> <li>• Maximum monitor: width 610 - height 618 mm</li> <li>• Due to its excellent stability it is also suitable for touchscreens</li> <li>• Cable clips and loops included</li> <li>• 2x separate table attachment required</li> </ul>	1	28 Jan - 01 Feb 2019
6	<b>Network switch</b>	<b>Cisco SG350-28MP</b> 26 x 10/100/1000 ports (24 PoE + ports with a power budget of 382 W) • 2 SFP slots • 2 mini GBIC combo ports <b>incl. rack mount brackets</b>	1	28 Jan - 01 Feb 2019
7	<b>Microphone protectors</b>	<b>Monacor WS-30</b> Microphone windscreen made of black foam	300	28 Jan - 01 Feb 2019
8	<b>Cable Extractors</b>	<b>Retractor Series/2 Network</b> Extron 70-1065-03	8	28 Jan - 01 Feb 2019
9	<b>Cable Extractors</b>	<b>Retractor Series/2 VGA-A</b> Extron 70-1065-11	8	28 Jan - 01 Feb 2019
10	<b>Cable Extractors</b>	<b>Retractor Series/2 HDMI</b> Extron 70-1065-04	8	28 Jan - 01 Feb 2019

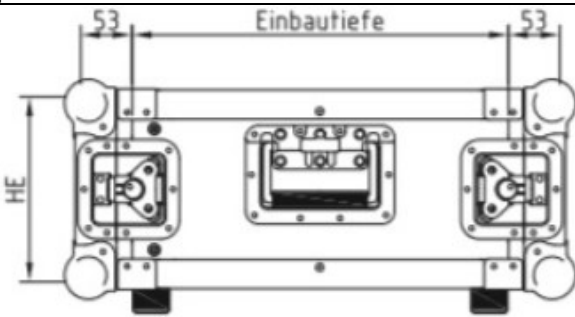




**Lot 11**

Ref.	Item	Specifications	Quantity	Delivery Date
<b>1</b>	<b>Flight Case</b>	<p><b>High quality 2RU Case</b>            Installation depth 458mm , Installation hight 2 RU            7,0 mm multiplex with ABS coating            Medium corner balls            inlays in the wood            two recessed folding handles            front double stepless rubber rails with rubber spring            four big rubber feet            Lid on the front            service flap on the back            Colour white</p>  <p><i>DD = Deckel vorne / Serviceklappe hinten</i></p>	8	28 Jan - 01 Feb 2019
<b>2</b>	<b>Rack Accessories</b>	<p><b>Adam Hall</b>  <b>1RU Rack drawer fitting in the rack, black</b></p>	8	28 Jan - 01 Feb 2019
<b>3</b>	<b>Flight Case</b>	<p><b>High quality 6RU Case</b>            Installation depth 458mm , Installation hight 6 RU            7,0 mm multiplex with ABS coating            Medium corner balls            Inlays in the wood            Two recessed folding handles            Front double stepless rubber rails with rubber spring            Four big rubber feet            Lid on the front            service flap on the back            Colour white</p>	8	28 Jan - 01 Feb 2019

Ref.	Item	Specifications	Quantity	Delivery Date
		 <p><b>DD = Deckel vorne / Serviceklappe hinten</b></p>		
4	<b>Rack Accessories</b>	19-inch 1 RU power strip with switch <b>Parts 87471 T</b> 8 x schuko sockets on the back, Powercon connection on the front Powercon female / connection line / Schuko male	8	28 Jan - 01 Feb 2019
5	<b>Rack Accessories</b>	1x Rack panel 1RU, 8 sockets, black 2x Neutrik NA3FDM 2x Neutrik NA3MDF 2x Neutrik NAHDMI-W-B 2x Neutrik NBB75DFG 4x High quality Video Patch cable HD-SDI (HDTV) SC-Vector 0.8 / 3.7, 1 x 0.80 mm <sup>2</sup> , BNC, 1m 4x High quality Microphone cable, 2 x 0.34 mm <sup>2</sup> , XLR / XLR, NEUTRIK connectors 1,00m 2x High quality HDMI cable - 1.00 meters 1x All needed small parts, for the assembly.	8	28 Jan - 01 Feb 2019
6	<b>Flight Case</b>	<b>High quality 12RU Case</b> Installation depth 458mm, Installation height 12 RU 7,0 mm multiplex with ABS coating Medium corner balls Inlays in the wood Two recessed folding handles Front double stepless rubber rails with rubber spring Lid on the front service flap on the back Colour white Removeable roll board, suitable for the Case	4	28 Jan - 01 Feb 2019
		 <p><b>DD = Deckel vorne / Serviceklappe hinten</b></p>		

Ref.	Item	Specifications	Quantity	Delivery Date
7	<b>Rack Accessories</b>	<b>Removeable roll board,</b>  suitable for the Case	4	28 Jan - 01 Feb 2019
8	<b>Rack Accessories</b>	<b>19-inch 1 RU power strip with switch <u>Parts 87471 T</u></b> 8 x schuko sockets on the back, Powercon connection on the front Powercon female / connection line / Schuko male  1x Rack panel 1RU, 12 sockets, black 1x 19-inch Cable entry panel, 1U with brush insert, black 1x 2RU Rack drawer fitting in the rack, black 2x Neutrik NA3FDM male 2x Neutrik NA3MDF female 6x Neutrik NAHDMI-W-B female 1x Neutrik NE8FDP-B female 1x Neutrik NO2-4FDW-1-A dual, female 2x High quality Microphone cable, 2 x 0.34 mm <sup>2</sup> , XLR male / RCA (chinch) Male, NEUTRIK connectors 1,50m 2x High quality Microphone cable, 2 x 0.34 mm <sup>2</sup> , XLR female / RCA (chinch) Male, NEUTRIK connectors 1,50m 10x High quality HDMI cable - 1.00 meters 10x High quality HDMI cable - 2.00 meters 1x Rack mounting kit (19-inch Rack mounting ears) for "Polycom Group 700" 1x Rack mounting kit (19-inch Rack mounting ears) for "cisco switch SF302-08PP" 1x All needed small parts, for the assembly	4	28 Jan - 01 Feb 2019
9	<b>Rack</b>	<b>High quality 12RU Case</b> Installation depth 458mm, Installation Hight 12 RU 7,0 mm multiplex with ABS coating Medium corner balls Inlays in the wood Two recessed folding handles Front double stepless rubber rails with rubber spring Rear double stepless rubber rails with rubber spring Lid on the front Lid on on the back Colour white	4	28 Jan - 01 Feb 2019

Ref.	Item	Specifications	Quantity	Delivery Date
		 <p>DD = Deckel vorne / Deckel hinten</p>		
10	<b>Rack Accessories</b>	<b>Removeable roll board,</b> suitable for the Case 	4	28 Jan - 01 Feb 2019
11	<b>Rack Accessories</b>	<b>2x Adam Hall 19" Parts 8747</b> 19-inch socket strip 8-fold, direct connection to schuko  <b>2x 19 inch rack shelf Parts "Adam Hall 8754"</b> 440 mm x 248 mm x 44,5 mm Universal hole pattern in the floor for mounting different devices	4	28 Jan - 01 Feb 2019
12	<b>Flight Case</b>	<b>Studio Rack 14 RU Manufacturer "gaeng-case"</b> Depth 550 Installation depth 485mm, Installation height 14 RU 15,0 mm multiplex Textured paint varnished No corner balls Glas front door no folding handles Front double stepless rubber rails with rubber spring No stepless rubber rails in the back Screwed service cover on the back Colour White  <p>ohne Rackschienen hinten</p>	1	28 Jan - 01 Feb 2019
13	<b>Rack Accessories</b>	<b>Adam Hall</b> 2HE Rack drawer fitting in the rack, black	6	28 Jan - 01 Feb 2019

**Lot 12**

Ref.	Item	Specifications	Quantity	Delivery Date
1	<b>Power Cable</b>	<b>Standard quality multiple plug with 3 Schuko plugs</b> without power switch, black with 5m cable. For indoor use, with mounting brackets	20	28 Jan - 01 Feb 2019
2	<b>Power Cable</b>	<b>Standard quality multiple plug with 3 Schuko plugs</b> without power switch, black with 3m cable. For indoor use, with mounting brackets	20	28 Jan - 01 Feb 2019
3	<b>Power Cable</b>	<b>Standard quality multiple plug with 3 Schuko plugs</b> without power switch, black with 1.5m cable. For indoor use, with mounting brackets	20	28 Jan - 01 Feb 2019
4	<b>Power Cable</b>	<b>Standard quality multiple plug with 8 Schuko plugs,</b> without switch, black with 5m cable. For indoor use, with mounting brackets	20	28 Jan - 01 Feb 2019
5	<b>Power Cable</b>	<b>Standard quality multiple plug with 8 Schuko plugs,</b> without switch, black with 3m cable. For indoor use, with mounting brackets	20	28 Jan - 01 Feb 2019
6	<b>Power Cable</b>	<b>Standard quality multiple plug with 8 Schuko plugs,</b> without switch, black with 1.5m cable. For indoor use, with mounting brackets	20	28 Jan - 01 Feb 2019
7	<b>Power Cable</b>	<b>Standard quality Schuko extension cable</b> for indoor use, black 3x 1,5mm <sup>2</sup> 10m	10	28 Jan - 01 Feb 2019
8	<b>Power Cable</b>	<b>Standard quality Schuko extension cable</b> for indoor use, black 3x 1,5mm <sup>2</sup> 7m	10	28 Jan - 01 Feb 2019
9	<b>Power Cable</b>	<b>Standard quality Schuko extension cable</b> for indoor use, black 3x 1,5mm <sup>2</sup> 5m	10	28 Jan - 01 Feb 2019
10	<b>Video Cable</b>	High quality DVI-D male to DVI-D male cable 1m	20	28 Jan - 01 Feb 2019
11	<b>Video Cable</b>	High quality DVI-D male to DVI-D male cable 2m	20	28 Jan - 01 Feb 2019
12	<b>Video Cable</b>	High quality DVI-D male to DVI-D male cable 5m	10	28 Jan - 01 Feb 2019
13	<b>Video Cable</b>	High quality DVI male to HDMI male cable 1m	40	28 Jan - 01 Feb 2019
14	<b>Video Cable</b>	High quality DVI male to HDMI male cable 2m	40	28 Jan - 01 Feb 2019
15	<b>Video Cable</b>	High quality DVI male to HDMI male cable 5m	40	28 Jan - 01 Feb 2019
16	<b>Video Cable</b>	High quality DVI male to HDMI male cable 7m	40	28 Jan - 01 Feb 2019
17	<b>Video Cable</b>	High quality HDMI male to HDMI male cable 0.5m	20	28 Jan - 01 Feb 2019
18	<b>Video Cable</b>	High quality HDMI male to HDMI male cable 1m	30	28 Jan - 01 Feb 2019
19	<b>Video Cable</b>	High quality HDMI male to HDMI male cable 2m	20	28 Jan - 01 Feb 2019
20	<b>Video Cable</b>	High quality HDMI male to HDMI male cable 5m	40	28 Jan - 01 Feb 2019

Ref.	Item	Specifications	Quantity	Delivery Date
21	<b>Video Cable</b>	High quality HDMI male to HDMI male cable 7m	20	28 Jan - 01 Feb 2019
22	<b>Video Cable</b>	High quality Displayport male to DVI male cable 2m	5	28 Jan - 01 Feb 2019
23	<b>Video Cable</b>	High quality Displayport male to DVI male cable 5m	5	28 Jan - 01 Feb 2019
24	<b>Video Cable</b>	High quality Displayport male to DVI male cable 7m	5	28 Jan - 01 Feb 2019
25	<b>Video Cable</b>	High quality Displayport male to HDMI male cable 2m	5	28 Jan - 01 Feb 2019
26	<b>Video Cable</b>	High quality Displayport male to HDMI male cable 5m	5	28 Jan - 01 Feb 2019
27	<b>Video Cable</b>	High quality Displayport male to HDMI male cable 7m	5	28 Jan - 01 Feb 2019
28	<b>Video Cable</b>	Sommer cable, BNC male to BNC male video cable, 75 Ohm, green, 1m	10	28 Jan - 01 Feb 2019
29	<b>Video Cable</b>	Sommer cable, BNC male to BNC male video cable, 75 Ohm, green, 2m	10	28 Jan - 01 Feb 2019
30	<b>Video Cable</b>	Sommer cable, BNC male to BNC male video cable, 75 Ohm, green, 5m	10	28 Jan - 01 Feb 2019
31	<b>Video Cable</b>	Sommer cable, BNC male to BNC male video cable, 75 Ohm, green, 10m	10	28 Jan - 01 Feb 2019
32	<b>Audio Cable</b>	XLR male to XLR female cable with Neutrik connector, black, 10m	20	28 Jan - 01 Feb 2019
33	<b>Audio Cable</b>	XLR male to XLR female cable with Neutrik connector, black, 7m	20	28 Jan - 01 Feb 2019
34	<b>Audio Cable</b>	XLR male to XLR female cable with Neutrik connector, black, 5m	20	28 Jan - 01 Feb 2019
35	<b>Audio Cable</b>	XLR male to XLR female cable with Neutrik connector, black, 2m	20	28 Jan - 01 Feb 2019
36	<b>Remote cable</b>	Usb male to USB female 3.0 Aktiv Extension Repeater 5m	3	28 Jan - 01 Feb 2019
37	<b>Converter</b>	rs232 to usb converter	4	28 Jan - 01 Feb 2019
38	<b>Cable cover</b>	Flexible neoprene cable conduit, cable management with Velcro closure, black, width about 13cm, length 30m	1	28 Jan - 01 Feb 2019
39	<b>Cable cover</b>	Plastic spiral hose with threading aid, diameter 30 mm, black, length 100m	1	28 Jan - 01 Feb 2019
40	<b>Cable cover</b>	flexible fabric cable conduit with Velcro, variable inside diameter up to 30 mm, black, 10m	1	28 Jan - 01 Feb 2019