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General Secretariat

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Tender specifications

Call for tenders UCA-23/008

Open procedure

UCA 23/008 - Acquisition of equipment, software licenses and related services for the Video Post-Production Platform infrastructure (VPPP) of the General Secretariat of the Council of the EU (Secretariat)

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TENDER SPECIFICATIONS

I. GENERAL INFORMATION

The Video Post-Production Platform (hereinafter referred to as "the VPPP") is the Audiovisual sector's main infrastructure for producing videos and making these available to the clients of the General Secretariat of the Council of the European Union (hereinafter referred to as "Secretariat").

"Host broadcasting" and audio visual production continue to be the core activity of the Council's audio-visual service. It has expanded over the years to include not only news coverage, but also the production of videos for internal and external web pages, documentary films, thematic clips, social media productions, dynamic infographics and beauty-shot stock footage filmed with high-end cameras, drone, etc., with the aim of presenting the EU's policy activities in a compelling way. Video is a format currently used by the Council's stakeholders and staff in their daily work, and it is one of the most impactful formats for political communication at large.

In order to do this, the Audio visual sector relies and manages a dedicated audio visual broadcast infrastructure which can be roughly divided in two main components:

- the **Live signal infrastructure** - allows the audio and video signals captured by cameras, to be transported through a dedicated infrastructure, monitored and mixed in our master control room, and possibly replayed where needed.
- the **File-based infrastructure** - allows to first transform these signals into digital files. These files are then identified and tagged, stored in a database for easy retrieval and processing, edited (e.g. extraction of highlights, audio processing, subtitling, etc.), converted to standard formats, published on a platform for stakeholders to download, and archived for longer term. While these activities are generally referred to as our "file-based workflow", **the VPPP refers to the file-based infrastructure** (hardware, software and related services) needed to make these workflows work.

Originally installed in 2009, the current VPPP is built on the Cinegy Media Assets Management (MAM) platform, to which several modules have been progressively added from 2011. The Cinegy MAM platform deals with the 'news' production workflow. In 2021, the GSC acquired Cantemo as a second MAM platform dealing with the 'special production' workflow (documentaries, thematic clips, social media productions, info clips for GSC internal use, ...).

For more details on the existing VPPP infrastructure and workflows, please refer to point I. Technical specifications – "CURRENT SITUATION : TECHNICAL DESCRIPTION OF THE VPPP" of these specifications and Appendix 3 "Schematic block diagram VPPP 2023" for a representation of the existing VPPP workflow and infrastructure.

The current framework contract (UCA 18/059), composed of 2 lots: Lot1 – 'core activities' and Lot2 – 'non-core activities', will expire, respectively in September 2023 and December 2023. The Secretariat is launching this call for tenders, composed of only 1 lot, with a view to conclude a new framework contract which will ensure continued smooth functioning of the platform and respond to increasing video production demand, in the context of evolving new technologies in the field.

II. PURPOSE OF THE CALL FOR TENDERS

The new framework contract - the 3rd contract concluded on the VPPP - is aimed at ensuring business continuity (i.e. keep the current platform up and running), but also bringing further improvements, updates and upgrades that fit with the continuous technological evolution in the broadcast domain, allowing the audiovisual sector to continue to deliver high quality services to its stakeholders.

The framework contract aims at ensuring that the VPPP meets the needs of the Secretariat and its stakeholders by providing:

1) Technological updates and upgrades: To keep the platform running, up-to-date with the continuous rapid pace of technological changes and production evolutions, to conform with broadcast-quality video production and thereby to the needs of the Secretariat's (media) stakeholders, the Secretariat needs to regularly add and update applications, production modules and hardware.

2) Increased capacity: To be able to handle the growing number of events and activities for which video coverage and video production is requested, together with the increased complexity of the Secretariat's video productions, the capacity of the platform needs to be increased and adapted.

3) Integrate innovative technologies (Automation, Data and Artificial Intelligence-based solutions): The possibility to cultivate continuous innovation in the Secretariat's audio-visual production. The Audiovisual sector must have a modular and flexible platform that allows it to anticipate and respond to demands for innovation in the coming years.

The future purchases for the VPPP via the new framework contract should allow the Secretariat to:

- ensure adequate treatment of the increasing volume of video and audio files;
- ensure the fast delivery of news footage on the TV Newsroom web platform.
- avoid bottlenecks and handle errors during capture of video signals, edit, conversion, compression and delivery of video files;
- secure, maintain and monitor the file-based video workflow;
- produce high-end editorial videos, social media audio-visual content and informative video clips for external and internal communication;
- keep the platform running and up to date with technological changes and in line with internal performance requirements and expected video quality.
- benefit from data-related and AI solution to considerably improve the management of video files (for adaptative search, speech to text transcription, translations, subtitles, automation and enrichment of metadata, etc)

The contractor will be responsible for the provision of upgrades and additional hardware and software modules and applications, including delivery, installation, integration into the existing Media Asset Management (MAM) and file-based workflow, maintenance, support, training, as well as developments (e.g. custom software developments) for the VPPP.

III. SEPARATION INTO LOTS

N/A

Technical specifications

I. CURRENT SITUATION: TECHNICAL DESCRIPTION OF THE VPPP

In order for the tenderers to get a proper understanding of the existing VPPP, here follows a detailed description of the VPPP currently installed. For a schematic block diagram representation of the existing VPPP workflow and infrastructure, see Appendix 3 "Schematic block diagram VPPP 2023" of these tender specifications.

A) Existing infrastructure

The Video Post-Production Platform (VPPP) is responsible for the recording, compression, publication and archiving of video material.

It is a combination of specific Media Asset Management software (e.g. Cinegy, Cantemo Portal), high performance servers with a lot of processing power (e.g. HP Proliant servers) and professional video components like specific video software, equipment and appliances (e.g. specific video acquisition cards, fibre cards, SDI video signal connectivity, FileCatalyst software, Video Codec packages that need to be installed on servers and workstations, video reference monitors, etc).

1. Server and Machine Park¹

The VPPP platform currently consists of a Production and Test Environment, with the following servers, workstations and appliances:

Production Environment:

- 2 clustered (Microsoft Failover Cluster) SQL Database servers:

Both are HP Proliant DL380p G8 servers, with as operating system Windows Server 2016 Standard 64 bit; SQL Server 2016.

Other services are clustered as well: DFS (file and storage shares are presented through a Distributed File System), Cinegy specific services, etc.

- 2 redundant Active Directory and DNS servers:

Both are HP Proliant DL325 G10 servers, with as operating system Windows Server 2016 Standard 64 bit.

- 5 Cinegy Capture servers:

All are HP Proliant DL380 G10 servers, with as operating system Windows Server 2016 Standard 64 bit.

- 5 FOR-A 9600 :

These are change-over and processing appliances to stabilize the Capture Servers' incoming signals.

¹ Please note that the products described hereunder, *except for the iMac Pro workstations, the Dell EMC² storage (Isilon and Vmax), the Quantum solution (Xcellis and StorNext), the Xendata server and the 2 LTO7 Tape libraries*, are covered by point II of the technical specifications - Legacy hardware and software (the existing VPPP infrastructure).

- 5 Cinegy Convert servers:
All are HP Proliant DL380p G10 servers, with as operating system Windows Server 2016 Standard 64 bit.
- 1 Cinegy Multiview server:
This is an HP Proliant DL380 G8 server, with as operating system Windows Server 2012 R2 Standard 64 bit.
- 2 redundant Kybio servers for monitoring purposes:
Both are HP Proliant DL380 G10 servers, with as operating system Ubuntu 18.04.
- 1 Cantemo Portal DB server:
This is HP Proliant DL380 G10 server, with as operating system CentOS 7.
- 1 Automation Pulse-It server:
This is HP Proliant DL380 G10 server, with as operating system CentOS 7.
- 2 Automation Pulse-It workstations
These are HP Zcentral G4 workstations with Windows 10 Professional 64 bit as OS.
- 1 Cinegy Air Video Playout server with 2 playout channels
This is an HP Proliant DL380 G10 server with Windows Server 2016 Standard 64 bit as operating system.
- 5 Cinegy Desktop workstations:
One is an HP Z620 workstation. The 4 others are HP Zcentral G4 workstations.
All 5 workstations are running Windows 10 Professional 64 bit as OS.
- 5 MacOs workstations :
These are iMac Pro workstations with MacOs Monterey 12.6.3 as OS, managed by the IT service of the Secretariat.
- 3 Cinegy Desktop MediaManager workstations:
These are HP Zcentral G4 workstations with Windows 10 Professional 64 bit as OS.
- 1 Cinegy Administrator workstation:
This is an HP Z6 workstation with Windows 10 Professional 64 bit as OS.
- 1 workstation for ticker control:
This is a HP Z420 workstation with Windows 10 Professional 64 bit as OS.
- Dell-EMC² Isilon storage nodes (NAS Storage), managed by the IT service of the Secretariat.
- Dell-EMC² Vmax storage with DFS cluster configuration, managed by the IT service of the Secretariat, hosting the Cinegy database.
- Quantum Xcellis storage with of 36 TB raw capacity (NAS Storage).
StorNext software is installed to manage the archive process from Cinegy MAM to LTO7. The Quantum storage solution is managed by the IT service of the Secretariat.
- IHSE Draco tera enterprise modular KVM system.
3 matrix (one K480-160 and two K480-080) linked with grid cards.
About 139 extender boards (CPU - CON) are connected to the matrix (Ethernet and Fibre).

- 1 Xendata Archive server, managed by the IT service of the Secretariat, interfacing between the Cinegy MAM system and the tape libraries.
- 2 HP MSL6480 tape libraries, managed by the IT service of the Secretariat. Both tape libraries are connected with and managed by the XenData server. They are also connected to the Quantum solution.
- FileCatalyst Direct and Central are installed on Azure cloud hosted servers. Hosting in the Azure cloud is taken care of by the IT service of the Secretariat, who ensure the necessary access. Management of the software is taken care of by the GSC audiovisual service.
- 1 Anydesk On Premise server:
This is HP Proliant DL380 G10 server, with as operating system Debian 11.

Test Environment:

- 1 Active Directory and DNS server:
This is an HP Proliant DL325 G10 server, with as operating system Windows Server 2008R2 Standard SP1 64 bit.
- 2 clustered (Microsoft Failover Cluster) SQL Database servers:
Both are HP Proliant DL380p G10 servers, with as operating system Windows Server 2016 Standard 64 bit; SQL Server 2016.
- 1 Cinegy test server (running the following Cinegy applications: Capture, Desktop, Convert, Air):
This is an HP Proliant DL380 G10 server, with as operating system Windows Server 2016 Standard 64 bit.

2. Cabling and network

All the servers and stations are part of a dedicated 1 and 10 Gigabit Ethernet Local Area Network (LAN) with several different Vlans.

The VPPP network, is a separate LAN infrastructure in the Council networks, but does depend on the Council infrastructure for internet access and first line network security (firewall).

The VPPP LAN is interconnected with the Master Control Room (MCR) LAN.

The HP servers are iLO connected to the switches for server monitoring and management purposes.

The type of Ethernet cables used are Cat6 network cables.

Some equipment is fibre connected:

A Dell-EMC² Vmax storage unit is fibre connected with the 2 SQL Database servers. Both are directly fibre attached and do not go via the switches.

Dell-EMC² Isilon Nodes are hosted in the datacentre of the IT service and fibre connected, passing via a switch.

The Xendata HSM Archive Server is fibre connected to the LTO Tape Libraries.

The Quantum HSM Xcellis and storage solution is fibre connected in the same way as the Isilon storage and is connected to the LTO tape libraries in a similar way as the Xendata Archive Server.

Video signals pass through coaxial cables (video connections).

3. System configuration

Here follows a description of the roles and tasks of each server and the applications running on each server or workstation.

All servers are file servers except the NODE-01 and NODE-02, which are the hosts for SQL servers being part of the Microsoft Failover Cluster.

File and Storage Shares are organised as Microsoft Distributed File System (DFS) for redundancy purposes and being part of the cluster as well.

CONVERT-01 to CONVERT-05:

These are the Cinegy import and export servers and they run the Cinegy Convert application and all its components. They are grouped together for faster compression purposes.

Capture-01 to Capture-05:

These 5 servers host the Cinegy Capture application only used for SDI ingesting.

FOR-A 9600 1 to 5:

These are processing and change-over appliances, used to guarantee the best quality of the incoming signals in the recording servers.

EDIT-01, EDIT -02, EDIT -03, EDIT -04, MCR°CINEGY-01:

These 5 workstations host each a Cinegy Desktop application, used for video editing.

MAC-Vert, MAC-Jaune, MAC-Bleu, MAC-Rouge and MAC-Newsroom:

These 5 workstations host each a Adobe Production Suite, used for video editing.

MEDIA-MANAGE-01 to MEDIA-MANAGE-03:

These workstations host each all Cinegy applications needed for video editing, media and MAM management.

Cinegy-Admin-01:

This workstation hosts all applications needed for media and MAM management, platform administration and monitoring.

NODE-01:

This server is the SQL server and hosts the Cinegy Media Archive application.

The server is part of the Microsoft Failover cluster with NODE-02 to guarantee the redundancy of the Database and system.

NODE-02:

The NODE-02 server is part of the Microsoft Failover cluster with NODE-01 to guarantee the redundancy of the Database and the system, is the failover SQL server and hosts the redundant Cinegy Media Archive application.

DNS-01:

This server has the role of DNS server, Active Directory server and DHCP server (DHCP is non-active as all is connected with fixed IP address).

DNS-02:

This server is the redundant DNS server, Active Directory server and DHCP server (DHCP is non-active as all is connected with fixed IP address).

PLAYOUT-01:

This machine hosts 2 Cinegy Air channels, used to play out video files.

XAS-1:

This Xendata Archive server hosts Xendata technologies used to archive media to two mirrored LTO tape libraries (6 drives each, the tape libraries are located in different areas). The XAS-1 is the link between the Cinegy MAM system and the LTO tape libraries. The Xendata Archive server and the LTO tape libraries are managed by the IT service of the Secretariat).

KYBIO-01:

The Kybio server hosts the system monitoring tool (Kybio). This application monitors the complete VPPP platform using SNMP and WMI.

KYBIO-02:

This server is the same as Kybio-01. It ensures the redundancy in case of failure of Kybio-01.

PORTAL-01:

This server hosts the second MAM (Cantemo). This MAM is dedicated to our 'Special productions' (non-news productions).

PULSE-01:

This server hosts the workflow automation software Pulse-it. This server is linked to the two Pulse workstations (PULSE WKST-01 & 02).

PULSE WKST-01 and PULSE WKST-02:

These are the workstations linked to the Pulse-01 server. They act as engines for processing.

Test Environment:

It is a small replication of the production environment to be able to test and validate workflows, updates ... This test environment is composed of 1 DNS server, 2 redundant Node Servers and 1 testing server running multiple applications (Capture, Air, Convert, Desktop).

FileCatalyst Server (FileCatalyst Direct Server, FileCatalyst Central, Express Client): these applications are installed on an Azure cloud server provided by the IT service of the Secretariat. This application ensures the accelerated transfer of files for publication to our Newsroom web platform (sending of files) and the accelerated file transfer from externally located production entities towards the VPPP infrastructure (reception of files).

ANYDESK-01:

This Anydesk on premise server hosts the Anydesk licenses and ensures remote connection for video editing purposes.

4. Other infrastructure (not to be covered under the conditions of this fwc)

- Reference monitors: Sony Trimaster EL, Ruige TL-B2150HD, Ruige TL-B1730HD, Plura PRM-217-3G.
- workstation monitors: Dell U2421E
- audio monitors: TSL PAM1 MK2
- Lawo VSM (Virtual Studio Manager): Cinegy Capture integrates with VSM through an API.

B) Existing workflow

The VPPP is a complete Media Asset Management (MAM) workflow, where every module is interlinked with others:

- 1) Secretariat video signals, provided through the video matrix of the Master Control Room (MCR), are captured via SDI video connectivity on Cinegy Capture stations, capable of registering, per Capture Channel, multiple different types of quality video files onto the online Media Storage.
Via Watch- and Import-folders, the MAM system is also capable of automatically ingesting video files.
The Secretariat's audiovisual service captures 2 different formats: a broadcast resolution and a proxy resolution. The broadcast resolution is a MXF format at 120 Mbps for HD (DNxHD codec). The low resolution (proxy format) is a H264 codec at 1,5 Mbps.
- 2) While the video signal is captured, the rough video file is edited on the Cinegy workstations and provided with the necessary content metadata. The system permits simultaneous editing and logging of the same video on different workstations while the capture is still ongoing.
- 3) When the edit is finished, it is sent to a Cinegy convert job: the system combines the edit metadata and the ingested rough media files and produces the final edited video files. This convert job is done by use of Cinegy MAM job folders and gets automatically pushed to the Cinegy Convert servers.
- 4) The Cinegy Convert application launches the requested file transcodings, according to the programming of the different job folders.
The Secretariat's audiovisual service delivers 3 types of final files: MP4 broadcast quality files at 18000 kbps VBR interlaced top field first, MP4 preview files and MP3 audio files.
- 5) The final transcoded video and audio files are automatically distributed to their final destinations on Azure, ready for publication onto the online Newsroom platform (<https://newsroom.consilium.europa.eu/>). This Newsroom platform is internally managed and hosted on the Azure cloud, receiving its files through a Azure blob storage container.
- 6) Another distribution channel are our 2 Cinegy Air licences, run on the same hardware. It is the Video Signal Playout server, capable of playing a video list on the internal TV screens (Internal 'TV Channel') or do playouts to Europe by Satellite (EbS).
- 7) The Xendata Archive Server is fully integrated with the Cinegy Archive functionality and permits a Hierarchal Storage Management (HSM) approach (online, near-line and offline media storage). Our XenData Archive server is our HSM manager: our near-line (12TB archive buffer) and offline archive. XenData provides the link between Cinegy MAM and the 2 tape libraries that are installed in the 2 Datacenters of the IT service of the Secretariat. The current Xendata Server is managed by the Secretariat's IT Service and is not part of this tendering procedure.
- 8) The Quantum Storage and HSM solution : A second MAM database has been created for the 'Public Sessions' workflow, with its own metadata. Similar to the Xendata HSM solution, Quantum Xcellis is fully integrated with the Cinegy Archive functionality and provides the link to the MAM and the 2 tape libraries. The Quantum Storage and HSM solution is managed by the Secretariat's IT Service and is not part of this tendering procedure.

Exceptions to this standard workflow are always possible, so the Secretariat needs to be able to quickly and properly adapt our workflow to the changing needs.

Performance is a key requirement of the VPPP, as is the capability to quickly adapt to changing needs or new functional requirements.

C) *Foreseen developments with an impact on the VPPP*

1. Transition from SDI signal distribution to broadcast-over-IP signal distribution

The broadcast industry's tendency is to move away from SDI video signal distribution towards IP-based signal distribution (NDI, SMPTE 2110 standard, ...). The Secretariat is step-by-step

transiting from an SDI infrastructure to a broadcast-over-IP infrastructure, either adopting the 2110 standard and/or the NDI protocol. The necessary cabling will be provided outside the scope of the framework contract resulting from this procurement procedure. However, the VPPP must be compatible to work with both IP video signals and SDI video signals.

2. Possible transition to 4K video production and distribution

The demand for the production of 4K high-end videos (documentaries, infoclips, etc) might dramatically increase in the following years. Although not yet indicated as a need for the Secretariat's audiovisual sector's news production, in case the broadcasters (to which we deliver video files in broadcast quality) require 4K broadcast video files due to their 4K workflows and infrastructure, we need to be able to adapt to these requirements.

3. Integration of artificial intelligence

The arrival of AI in the broadcast world is a new challenge.

The secretariat has begun its reflection on the integration of AI into the video production workflows.

The integration of AI should allow, for example, metadata enrichment, automatic transcription, automatic translation, object recognition, etc.

The contractor will be a partner for this integration: he will provide the necessary technical details and ensure the compatibility of any new AI module with the current infrastructure and workflow.

4. Security concerns about broadcast infrastructure and (live) video production

Security is currently a hot topic in the broadcast market: with the move from an SDI infrastructure to an IP infrastructure, the broadcast world has become now prone to the common security problems that regular IT infrastructures know since years (DOS attacks, ransomware, etc). As broadcast has different requirements than regular IT office installations, security measures should be tailored to the broadcast needs, allowing hassle-free live video production.

Security is handled by the GSC's internal IT services and outside the scope of the framework contract resulting from this procurement procedure. However, the Contractor will most likely have to provide the necessary advice and consultation to the GSC's internal IT services in order to have a smooth running VPPP infrastructure and video production.

II. LEGACY HARDWARE AND SOFTWARE (THE EXISTING VPPP INFRASTRUCTURE)

The Contractor must, under the same conditions as for hardware and software acquired under the framework contract resulting from this procurement procedure (as described below under Section VI), offer support, training, maintenance, annual license SLA renewals, repairs and replacement for all legacy hardware and software already installed at the Secretariat's VPPP.

A description of the existing infrastructure is to be found under Section I.A) of these technical specifications, and Appendix 3 "Schematic block diagram VPPP 2023" for a representation of the existing VPPP workflow and infrastructure.

The iMac Pro workstations, the Dell EMC² storage (Isilon and Vmax), the Quantum solution (Xcellis and StorNext), the Xendata server and the 2 LTO7 Tape libraries, are managed by the IT service of the Secretariat and are not part of this framework contract.

III. WARRANTY

New hardware products must be covered by a minimum 2-year guarantee, unless otherwise specified in the individual product and functionality descriptions as described below under Section VI.

The Contractor guarantees that Software delivered under this Framework contract, whether or not developed in execution of this Framework contract, will not fail to execute its programming instructions due to defects and workmanship, when properly installed and used on the device designated by the Contractor.

IV. DOCUMENTATION

During the entire duration of the framework contract resulting from this call for tenders, the Contractor will provide the following documentation:

For hardware:

Documentation, like (user) manuals, installation plans, connection plans and schemas (but not limited to the afore-mentioned), will be provided by the Contractor to the Secretariat.

Documentation will be kept up to date by the Contractor and will be provided via an accessible document repository from where the Secretariat can download the necessary files. Installation plans, connection plans and schemas will be provided by the Contractor in an editable electronic format (for example AutoCAD) and in Scalable Vector Graphics (SVG) format. The necessary cable number identification and labelling - network and video cabling - will be provided and executed by the Contractor. The information about cable numbering and identification will be included in the installation and connection plans. Any modification on existing labelling will be executed, documented and made available by the Contractor.

Once a year, upon request of the Secretariat's audiovisual service, the Contractor shall provide the necessary (updated) Manufacturer's product catalogues for products relevant to this framework contract (GPU, Video ingest and outgest boards, switches, etc).

For software:

The contractor will provide the Secretariat with a clear overview of all licenses and/or subscriptions, including information about type of license, start date, duration and the date when they are due for (SLA) renewal. This license and subscription overview will be available to the Secretariat minimum twice a year, or upon request of the Secretariat. Ideally, the overview can be consulted by the Secretariat at any moment via a web interface.

Once a year, the Contractor shall provide the necessary information to the Secretariat's audiovisual service about licensing roadmaps of the Manufacturer (indication of license changes, licensing system changes, shift in products, etc).

Documentation, like (user) manuals and technical documentation (data sheets, white papers on implementation, etc) will be made available to the Secretariat. Documentation will be kept up to date by the Contractor and will be provided via an accessible document repository.

The document repository will be accessible by the Secretariat by the date of the first delivery of the first Purchase Order implementing the framework contract.

Documentation handover arrangements:

The Secretariat will provide the documentation on hardware installations (like installation plans, connection plans and schemas) and software licenses and subscriptions of the existing

infrastructure to the Contractor to which the new framework contract has been awarded. The (new) Contractor must maintain the documentation up to date as described above.

In order to ensure business continuity, by the end of the framework contract but no later than 30 days after the final delivery on the last purchase order issued under this framework contract, the Contractor must ensure that all documentation has been correctly updated and made available to the Secretariat.

If the deadline of 30 days as described above is not respected, the Contractor will be liable for liquidated damages of 1 000€ for each day of delay.

V. DELIVERY CONDITIONS AND ARRANGEMENTS FOR RECEIPT OF DELIVERIES

Delivery times for hardware:

Delivery times of the acquired hardware will be mutually agreed and specified in the Purchase Order (PO).

Information on the consignment note (delivery note):

The consignment note needs to contain the following information: PO number; framework contract number; product information (brand and model); serial number of the hardware product; license number (license key) of the software; (extended) warranty conditions.

VI. MINIMUM TECHNICAL AND FUNCTIONAL REQUIREMENTS

Here follows, in different sections, a description of **all the minimum technical and functional requirements of the products and services requested under this framework contract.**

In many cases, only to facilitate the work for the Tenderer, there is a reference to an example of a specific product or service compliant with the corresponding minimum technical and functional requirements. However, the Tenderer is invited to offer any product or service compliant with the minimum technical and functional requirements described in this tender.

Only offers compliant with the minimum requirements will be considered in the technical evaluation.

A. Hardware

Delivery, preparation, installation, integration into the existing infrastructure and into the existing workflow, configuration and putting into production of hardware equipment and items from the Products Price list, while ensuring the overall well-functioning of the complete platform, will be included in the offered acquisition price of the hardware equipment or items. The acquisition price includes the necessary minor cabling, whether network or video cabling, fibre or copper, to be able to perform the correct installation and integration. 'Minor cabling' is defined as (inter)connecting application servers, switches, workstations, etc. to the existing infrastructure. It is not the purpose to transport data signals over long distances (not from building to building, not over different floors). Maximum distance to cover is 10 metres.

Whenever hardware maintenance is indicated in the mandatory minimum requirements for specific hardware, the Tenderer shall propose a hardware maintenance contract for that specific hardware with a separate pricing as indicated in the Products Price List.

The hardware maintenance contract will cover (firmware and/or software) updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA. This could apply to servers, workstations, network equipment, KVM equipment and will be each time specifically indicated per hardware item in the minimum requirements.

A copy of the hardware maintenance contract between Manufacturer and Contractor, or proof of the existence of such contract with indication of service levels, will be provided to the Secretariat upon acquisition of specific hardware including a maintenance contract.

The cost for this hardware maintenance contract will be calculated per year.

An example of a hardware maintenance contract: HP Carepack

The Tenderer will provide the Manufacturer's product catalogue whenever requested as specified in the below requirements.

The Tenderer will supply the most recent Recommended Retail Price list (RRP) for all the proposed brands as annex to his technical offer.

A.1. Computers

A.1.1. Audiovisual Workstations

A.1.1.1. Regular Audiovisual Workstations

The workstations are video editing workstations. The necessary workstation monitors will **not** be included in the workstation packet but mentioned and priced separately (see Section VI A.1.1.3 below).

The workstations will have the necessary CPU, clock speed and RAM to allow for editing of HD/4K video content and images. After contract award: review of the hardware configuration, when a specific workstation is needed, will be discussed with the Contractor and accordingly adapted in the products price list (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

The hardware specifications will be compatible with and allow the installation and running of Cinegy MediaDesktop application.

The workstations will be mounted into a rack.

Minimum requirements for the regular audiovisual workstations:

- Operating System: Windows 10 Pro 64bit Preinstalled
- Intel Xeon Processor W series, or equivalent : End-of-life processors must be avoided.
- Dual eight core
- Minimum 3.7 GHz
- 32GB DDR4 Memory
- 4X10Gb Ethernet network connection
- 1TB SSD
- NVIDIA RTX A2000 (or equivalent)
- Hardware Maintenance, priced separately, covering firmware updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year.

For example: HP Zcentral G4.

Article reference in the "Financial Tendering form (Products Price list)" (Annex V): **A-1_001** and **A-1_002**.

A.1.1.2. High-end Audiovisual Workstations

These high-end video editing workstations will be used for 3D effect editing, compositing and rendering and consist of a Minitower, a mouse and a Belgian Azerty keyboard. The necessary workstation monitors will **not** be included in the workstation packet but mentioned and priced separately (see Section VI A.1.1.3 below).

The workstations' minitower will have the necessary CPU, clock speed and RAM to allow for 3D editing, compositing and rendering of video content and images.

The hardware specifications will be compatible with and allow the installation and running of Adobe After Effect software and Maxon Cinema 4D software for the 3D compositing/editing. It will be possible to put the Minitower into a rack.

Minimum requirements for the high-end audiovisual workstations:

- Operating System: Windows 10 Pro 64bit Preinstalled
- Intel Xeon Processor W series, or equivalent: End-of-life processors must be avoided.

- Minimum Dual 16 core
- Minimum 3.00 GHz
- 128GB DDR4 Memory
- 4 X 10Gb Ethernet network connection
- 2x1TB Solid State Drive
- NVIDIA RTX A4000 (or equivalent)
- Hardware Maintenance, priced separately, covering firmware updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year.

For example: HP Z8 G4.

Article reference in the "Financial Tendering form (Products Price list)" (Annex V): **A-1_003** and **A-1_004**.

A.1.1.3. *Audiovisual Workstations Monitors*

The audiovisual workstations are currently each equipped with 2 HD resolution monitors. Individual editing tasks per workstation might differ (news edit station, 3D-effects edit station, etc) and the monitor needs to be fitting to the necessary tasks at hand. In certain layouts, 2 regular monitors next to each other might not be the best setup, where a curved monitor would be more fitting for the job.

The Tenderer will propose 2 types of monitors, a regular standard monitor and a curved monitor.

The proposed monitors will be connected to the workstations and/or KVM and must be compatible.

Minimum requirements for the regular audiovisual workstation monitors:

- LCD LED 24-inch backlit
- Display size (diagonal): 24"
- View angle: more than 178° horizontal 178° vertical
- Minimum Resolution: 1920x1080 - 60 Hz
- Brightness: 250 cd/m²
- Contrast ratio: 1000:1
- Colors : 16,7 million
- Pixel pitch: 0.27 mm
- Response time: 5 ms fast
- 1 DisplayPort
- 1 HDMI
- 2 usb 3.0 ports

For example: Dell U2422HE.

Minimum requirements for the curved audiovisual workstation monitors:

- Curved Monitor
- Display size (diagonal): 38"
- View angle: more than 170 horizontal 170 vertical
- Minimum Resolution: 3840 x 1600 at 60 Hz
- Aspect ratio: 21:9
- Brightness: 300 cd/m²
- Contrast ratio: 1000:1
- Colors : 1,07 billion
- Pixel pitch: minimum 0.25 mm

- Response time: 5 ms fast
- Minimum 1 DisplayPort
- Minimum 1 HDMI
- Minimum 2 usb 3.0 ports
- Minimum 2 USB-C

For example: Dell U3821DW.

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_005** and **A-1_006**.

A.1.1.4. *Mouse and keyboard*

The audiovisual workstations are currently connected to a IHSE KVM solution.

The currently used keyboard and mouse are :

- Logitech K120 for Business Azerty Belgium (*920-002525 Azerty Belgium*).
- Mouse Logitech M500S

For technical compatibility reasons, the Secretariat's audiovisual service needs the same products.

The Tenderer will propose the specific keyboard and mouse model.

Minimum requirements of the requested mouse and keyboards:

- Keyboard AZERTY Belgium: The proposed keyboard must be identical to the existing keyboards (Logitech K120 for Business 920-002525), to facilitate setup, configuration and management of KVM infrastructure.
- Mouse: The proposed mouse must be identical to the existing mouse (Logitech M500S), to facilitate setup, configuration and management of KVM infrastructure.

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_007** and **A-1_008**.

A.1.1.5. *Additional RAM for audiovisual workstations*

Whenever a workstation – including the legacy, existing workstations - is lacking in performance due to insufficient RAM, or when a RAM memory module is defective, separate RAM modules should be installed into the existing workstations.

The choice of additional RAM memory and its specifications will depend on the proposed hardware.

The Tenderer will also propose a RAM memory module compliant with the existing HP Zcentral 4R Xeon 2255 workstations.

The Tenderer will propose:

- The same RAM memory module as proposed with the 'regular audiovisual workstation' hardware in A.1.1.1
- The same RAM memory module as proposed with the 'high-end audiovisual workstation' hardware in A.1.1.2
- a RAM memory module compliant with the existing HP Zcentral 4R Xeon 2255 workstations, with the following minimum requirements:
 - o HPE SmartMemory
 - o DDR4
 - o 8 GB

- 2933 MHz
 - DIMM 288 pin
- Example: HPE 8GB 1RX8 PC4-2933Y-R

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_009** till **A-1_011**.

A.1.1.6. *Internal storage disks for audiovisual workstations*

Whenever a workstation – including the legacy, existing workstations - is lacking in internal storage capacity or storage performance or when an internal storage disk is defective, individual internal storage disks should be installed into the existing workstations.

The choice of type of storage disks and its specifications will depend on the proposed hardware.

The Tenderer will also propose an internal storage disk compliant with the existing HP Zcentral 4R Xeon 2255 workstations.

The Tenderer will propose:

- The same internal storage disk as proposed with the 'regular audiovisual workstation' hardware in A.1.1.1
- The same internal storage disk as proposed with the 'high-end audiovisual workstation' hardware in A.1.1.2
- an internal storage disk compliant with the existing HP Zcentral 4R Xeon 2255 workstations.
 - HPE Z Turbo Drive 1 TB SSD

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_012** till **A-1_014**.

A.1.2. Servers

A.1.2.1. *General Audiovisual Servers*

The general audiovisual servers are high performance IT servers and will be used for DNS and active directory server, video monitoring, Cinegy Archive MAM server, ... (see description of existing infrastructure in Section I of the technical specifications, and Appendix 3 "Schematic block diagram VPPP 2023" for a representation of the existing VPPP workflow and infrastructure).

According to the individual tasks and roles accredited to each machine and depending on the software and services that it will run, each server will have different setup and hardware configuration.

Each server will have the necessary cores (CPU), clock speed, RAM and PCIe slots to allow for effective task handling, according to the software or Cinegy application the server will be running and the tasks it will be executing. After contract award: review of the hardware configuration, when a specific server is needed, will be discussed with the Contractor and accordingly adapted in the products price list (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

The hardware specifications must be compatible with Cinegy hardware specifications for each individual Cinegy application.

Minimum requirements for the General audiovisual servers:

- Rack-mountable
- Operating System: Windows Server 2016 Standard edition preinstalled (Windows 10 Professional 64bit could be applied where indicated according to the Cinegy recommended technical specifications).

- Intel Xeon Processor Silver series, or equivalent: End-of-life processors must be avoided.
- Minimum Dual 8 core
- Minimum 3.2 GHz
- 64GB RAM
- Internal storage capacity: minimum 2x480GB SSD
- Redundant Power Supply Unit (PSU)
- Minimum 2 standard height PCIe slots and 1 Low profile PCIe slot
- Minimum dual 10 Gb Ethernet adapter
- iLO management
- Build-in RAID management
- NVIDIA RTX A2000 (or equivalent)
- Hardware Maintenance, priced separately, covering firmware updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year

Example: HPE ProLiant DL380 Gen10 4215R model.

Article reference in the "Financial Tendering form (Products Price list)" (Annex V): **A-1_015** and **A-1_016**.

A.1.2.2. *High-end Audiovisual Servers*

The high-end audiovisual servers are high-end performance IT servers and will be used for video capture, video compression/conversion, video multiviewing, video channel route, and other high-end performance demanding (CPU cores, clock speed, RAM, network connectivity, etc) audiovisual tasks and roles (see description of existing infrastructure in Section I of the technical specifications, and Appendix 3 "Schematic block diagram VPPP 2023" for a representation of the existing VPPP workflow and infrastructure).

According to the individual tasks and roles accredited to each machine and depending on the software and services that it will run, each server will have different setup and hardware configuration.

Each server will have the necessary cores (CPU), clock speed, RAM and PCIe slots to allow for effective task handling, according to the software or Cinegy application the server will be running and the tasks it will be executing. After contract award: review of the hardware configuration, when a specific server is needed, will be discussed with the Contractor and accordingly adapted in the products price list (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

The hardware specifications must be compatible with Cinegy hardware specifications for each individual Cinegy application.

Minimum requirements for the high-end audiovisual servers:

- Rack-mountable
- Operating System: Windows Server 2016 Standard edition preinstalled (Windows 10 Professional 64bit could be applied where indicated according to the Cinegy recommended technical specifications).
- Intel Xeon Processor Gold series, or equivalent: End-of-life processors must be avoided.
- Minimum Dual 8 core
- Minimum 3.0 GHz
- 128GB RAM
- Internal storage capacity: minimum 2x480GB
- Flexible network options: Network controller allows for Gigabit Ethernet (1GB and 10 GB) and fibre connections: Server allows installation of 2 network card adapters

- Redundant Power Supply Unit (PSU)
- Minimum 2 standard height PCIe slots and 1 Low profile PCIe slot
- Minimum dual 10 Gb Ethernet adapter
- iLO management
- NVIDIA RTX A4000 (or equivalent)
- Hardware Maintenance, priced separately, covering firmware updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year

Example: HPE ProLiant DL380 Gen10 Plus 5315Y model.

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_017** and **A-1_018**.

A.1.2.3. *Additional RAM for audiovisual servers*

Whenever a server – including the legacy, existing servers - is lacking in performance due to insufficient RAM, or when a RAM memory module is defective, separate RAM modules should be installed into the existing servers.

The choice of additional RAM memory and its specifications will depend on the proposed hardware.

The Tenderer will also propose a RAM memory module compliant with the existing HP DL380 Gen10 servers.

The Tenderer will propose:

- The same RAM memory module as proposed with the 'general audiovisual server' hardware in A.1.2.1
- The same RAM memory module as proposed with the 'high-end audiovisual server' hardware in A.1.2.2
- a RAM memory module compliant with the existing HP DL380 Gen10 servers, with the following minimum requirements:
 - o HPE SmartMemory
 - o DDR4 – module
 - o 32 GB
 - o 3200 MHz
 - o DIMM 288 pin

Example: HPe 32GB 2RX4 PC4-3200AA-R

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_019** till **A-1_021**.

A.1.2.4. *Internal storage disks for audiovisual servers*

Whenever a server – including the legacy, existing servers - is lacking in internal storage capacity or storage performance or when an internal storage disk is defective, individual internal storage disks should be installed into the existing servers.

The choice of type of storage disks and its specifications will depend on the proposed hardware.

The Tenderer will also propose an internal storage disk compliant with the existing HP DL380 Gen10 servers.

The Tenderer will propose:

- The same internal storage disk as proposed with the 'general audiovisual server' hardware in A.1.2.1
- The same internal storage disk as proposed with the 'high-end audiovisual server' hardware in A.1.2.2
- an internal storage disk compliant with the existing HP DL380 Gen10 servers.
 - o ProLiant DL380 Gen10 Entry SMB 480GB SATA 6G RI SSD

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_022** till **A-1_024**.

A.1.3. Graphical Processing Unit (GPU) video cards

Powerful graphic cards, with the right processing power and graphics acceleration, are necessary to allow for a smooth video production from video capture, over editing, to conversion and playout of the video material.

The GPU specifications must be compatible with Cinegy hardware specifications for each individual Cinegy application.

The GPU for audiovisual servers needs to be compatible with all proposed types of servers.

A.1.3.1. GPU for regular audiovisual workstations

Minimum requirements for the regular audiovisual Workstations' video graphics cards (GPU):

- Compatibility with Cinegy Desktop application.
- Memory capacity: 6 GB GDDR6
- Memory interface: 192-bit
- Memory bandwidth: up to 288GB/s
- CUDA cores: 3328
- PCIe 4.0 x16
- 4x mDP 1.4a
- Compute APIs : CUDA, DirectCompute, OpenCL
- Graphics APIs : DirectX, Shader Model, OpenGL, Vulkan

Example: NVIDIA RTX A2000.

The Tenderer will propose:

- a GPU for the proposed 'regular audiovisual workstations' in A.1.1.1
- a GPU compliant with the existing HP Zcentral 4R Xeon 2255 Workstation

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_025** and **A-1_026**.

A.1.3.2. GPU for high-end audiovisual workstations

Minimum requirements for the high-end audiovisual Workstations' video graphics cards (GPU):

- Compatibility with Adobe Creative Suite, Maxon Cinema 4D.
- Compatibility with the proposed hardware and OS.
- Memory capacity: 16 GB GDDR6
- Memory interface: 256-bit
- Memory bandwidth: up to 448GB/s
- CUDA cores: 6144

- PCIe 4.0 x16
- Single slot compact form factor
- 4x DisplayPort 1.4a
- Compute APIs : CUDA, DirectCompute, OpenCL
- Graphics APIs : DirectX, Shader Model, OpenGL, Vulkan

Example: NVIDIA RTX A4000.

The Tenderer will propose:

- a GPU for the proposed 'high-end audiovisual workstations' in A.1.1.2

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_027**.

A.1.3.3. GPU for audiovisual servers

Minimum requirements for the audiovisual servers' video graphics cards (GPU):

- Memory capacity: 16 GB GDDR6
- Memory interface: 256-bit
- Memory bandwidth: up to 448GB/s
- CUDA cores: 6144
- PCIe 4.0 x16
- Single slot compact form factor
- 4x DisplayPort 1.4a
- Compute APIs : CUDA, DirectCompute, OpenCL
- Graphics APIs : DirectX, Shader Model, OpenGL, Vulkan

Example: NVIDIA RTX A4000.

The Tenderer will propose:

- a GPU for the proposed 'audiovisual servers' in A.1.2.1 and A.1.2.2
- a GPU compliant with the existing HP DL380 Gen10 servers.

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-1_028 till A-1_029**.

As GPU cards evolve at such a speed and the choice of type of GPU depends largely on the compatibility with the application run on the workstation or server and the tasks to be performed by those, the Tenderer will provide the Manufacturer's product catalogue of the proposed brand as annex to his offer.

After contract award: whenever a workstation or server is required, the exact GPU needed for that workstation or server will be selected together with the Contractor, according to the individual GPU requirements needed, depending on the type of tasks to be executed by the workstation or server. The products price list will be accordingly adapted (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

A.1.4. Video ingest and outgest boards

Powerful video boards, with the right input and output connectivity and processing power, are necessary to allow for a smooth operation from video capture, over editing and viewing, to conversion and playout of the video material.

A.1.4.1. Video boards for audiovisual workstations

This is for direct capture into the workstations and play-out to any destination of the video matrix, including reference monitor.

Minimum requirements for the audiovisual Workstations' video boards:

- The video board must be compatible with Cinegy minimum requirements for Cinegy MediaDesktop application.
- The video board must be compatible with the proposed workstation hardware.
- No "End-of-life" card
- SDI video input : 1 x SD/HD/2K/4K 10 bits. compatible 6G 4:2:2 and 3G 4:4:4.
- SDI video output : 1 x SD/HD/2K/4K 10 bits. compatible 6G 4:2:2 and 3G 4:4:4.
- Analog audio input : 4 professional balanced analog audio channels via 1/4 inch jack connectors.
- Analog audio output : 4 professional balanced analog audio channels via 1/4 inch jack connectors. Channels 3 and 4 switchable on AES / EBU outputs.
- SDI audio input: 16 integrated channels in HD / 2K / 4K. 8 integrated channels in SD.
- SDI audio output: 16 integrated channels in HD / 2K / 4K. 8 integrated channels in SD.
- HDMI video input : 1 x HDMI type A connector.
- HDMI video output: 1 x HDMI type A connector.
- HDMI audio input: 8 built-in channels in SD, HD, 4K.
- HDMI audio output: 8 built-in channels in SD, HD, 4K.
- Sync input: Tri-Sync or Black burst.
- Computer Interface: PCI Express 4 lane generation 2, compatible with 4, 8 and 16 lane PCIe
- Supported Codecs: AVC-Intra, AVCHD, Canon XF MPEG2, Digital SLR, DV-NTSC, DV-PAL, DVCPRO50, DVCPROHD, DPX, HDV, XDCAM EX, XDCAM HD, XDCAM HD422, Apple ProRes 4444, Apple ProRes 422 (HQ), DNxHR & DNxHD, Apple ProRes 422, Apple ProRes (LT), Apple ProRes 422 (Proxy), Uncompressed 8-bit 4:2:2, Uncompressed 10-bit 4:2:2, Uncompressed 10 bit 4:4:4.
- HD Format Support: 720p50, 1080p25, 1080i50, 1080p50.
- Color Space: REC 601, REC 709
- Hardware-based realtime colorspace conversion
- HD Down Conversion: Built in, hardware down converter outputs HD-SDI on SDI A output, SD-SDI on SDI B output and Composite and S-Video for HD video formats on playback. Switch analog video to Component and choose HD or SD output. Select between letterbox, anamorphic 16:9 and center cut 4:3 styles.
- HD Up Conversion: Built in, hardware up conversion from SD to 720HD or 1080HD on playback. Select between 4:3 pillarbox, 14:9 pillarbox and 16:9 zoom.
- Cross Conversion: Built-in, hardware cross conversion from 720HD to 1080HD and 1080HD to 720HD on playback.

Example: Blackmagic DeckLink Studio 4K.

Article reference in the "Financial Tendering form (Products Price list)" (Annex V): **A-1_030**.

Video boards evolve at such a speed and the choice of type of video board depends on the compatibility with the application run on the audiovisual workstation and the tasks to be performed by those.

After contract award: whenever a workstation is required, the exact video board needed for that workstation will be selected together with the Contractor, according to the individual video board requirements needed, depending on the type of tasks to be executed by the workstation. The products price list will be accordingly adapted (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

A.1.4.2. Video boards for audiovisual servers

Because of the migration from an SDI to 'broadcast-over-IP' infrastructure, 2 different types of video boards for the audiovisual servers might be required, depending on the specific tasks a server has to execute. A video board still capable to handle and equipped with HD SDI connections will be needed for a server interfacing with other SDI-based infrastructure (Riedel MediorNet for example), while a server interacting with the infrastructure already migrated to 'broadcast-over-IP' according to the 2022-6/-7 or 2110-standard, will need an IP-based video board.

SDI boards might be installed in the Cinegy Capture Pro server and the Cinegy Air Pro server. This list is not exhaustive. Other application servers might be in need of SDI boards and it will be possible to install the SDI boards in the respective hardware.

IP-based video boards might be installed in the Cinegy Capture Pro server, the Cinegy Air Pro server, the Cinegy Route server, Cinegy Transport server, Cinegy Multiviewer server and Cinegy Live server.

This list is not exhaustive. Other application servers might be in need of IP-based video boards and it will be possible to install the IP-based video boards in the respective hardware. The video board specifications must be compatible with Cinegy hardware specifications for each individual Cinegy application.

a) Minimum requirements for the audiovisual servers SDI I/O video boards:

- Windows OS compatible (drivers)
- The video board must be Cinegy OEM certified/compatible with Cinegy minimum requirements for the Cinegy application the server runs.
- The video board must be compatible with the proposed server hardware.
- No "End-of-life" card
- Bus Interface: PCIe Gen3 x8
- Form Factor: Low-profile, half-length PCIe
- Connectors: Micro BNC (HD-BNC)
- Sync Input: Analog blackburst, tri-level sync (genlock) or LTC (ST12-1) reference input
- Serial numbering: 64-bit unique ID per card
- LTC Input: Natively supported on reference input; or can be added through a companion LTC card (option)
- Video Signal Modes: Single-link 4:2:2 10-bit, Dual Link 4:2:2 10-bit, Quad-Link 4:2:2 10-bit
- Video Interfaces: 12G-SDI (ST 2082-10), 6G-SDI (ST 2081-10), 3G-SDI Level A (ST 425-1 Level A Mapping), 3G-SDI Level B-DL (ST 425-1 Level B Dual-Link Mapping), 3G-SDI 3G Level B-DS (ST 425-1 Level B Dual-Stream Mapping), Dual Link 3G-SDI (ST 425-3), Quad Link 3G-SDI (ST 425-5), HD-SDI (ST 292), Dual Link HD-SDI (ST 372)
- Video Formats:
 - o HD 1920x1080 : 1080i50, 1080p25, 1080p24, 1080psf30, 1080psf25, 1080psf24, 1080p60 A/B, 1080p50 A/B, 1080p60, 1080p50.
 - o 4K 3840x2160 or 4096x2160, in 8 or 10-bit, 2 Sample Interleave or Square Division : 2160p60, 2160p50, 2160p30, 2160p25, 2160p24
- Audio formats: Embedding or de-embedding of up to 16 digital audio channels per HD-SDI link or up to 32 digital audio channels per 3G-SDI link. (ST 272M and ST 299-x).
- Ancillary data: ST 291, ST 272/299 (Audio), ST 12-2 (VITC), ST 352 (payload ID), ST 334 (closed captions)
- Hardware Maintenance, priced separately, covering firmware updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year (if available)

Example: DeltaCast Delta-12G-elp-h 1c.

b) Minimum requirements for the audiovisual servers' IP-based video boards:

- Windows OS compatible (drivers)
- The video board must be Cinegy certified/compatible with Cinegy minimum requirements for the Cinegy application the server runs.
- The video board must be compatible with the proposed workstation hardware.
- No "End-of-life" card
- Bus Interface: PCIe Gen2 x8
- Form Factor: Low-profile, half-length PCIe
- Connectors: Dual-input 10GbE SFP+
- Serial numbering: 64-bit unique ID per card
- LTC Input: PTP ST 2059 support
- Video Signal Modes: Video transport as per SMPTE ST2110-x
- Video Interfaces: ST 2110-20 - ST 2110-21 - ST 2110-30 - ST 2110-40
- Video Formats:
 - SD: NTSC 525i59.97; PAL 625i50 -
 - HD: 720p23.98/24/25/29.97/30/50/59.94/60;
 - 1080i/p/psf 23.98/24/25/29.97/30/50/59.94/60;
 - 2048p 23.98/24/25/29.97/30/47.95/48/50/59.94/60
- Audio formats : ST2110-30 - Embedding or de-embedding of up to 32 uncompressed digital audio channels
- Ancillary data : ST2110-40 support
- Hardware Maintenance, priced separately, covering firmware updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year (if available)

Example: DeltaCast Delta-ip-ST2110 10.

The Tenderer will propose:

- a SDI I/O video board for the audiovisual servers
- Hardware Maintenance for SDI I/O video board for the audiovisual servers
- a IP-based video board for the audiovisual servers
- Hardware Maintenance for IP-based video board for the audiovisual servers

Article reference in the "Financial Tendering form (Products Price list)" (Annex V): **A-1_031** till **A-1_034**.

As video boards evolve at such a speed (in relation with the migration from SDI to IP video infrastructures) and the choice of type of video board depends on the compatibility with the application run on the audiovisual server and the tasks to be performed by those, the Tenderer will provide the Manufacturer's product catalogue of the proposed brand as annex to his offer. After contract award: whenever a server is required, the exact video board needed for that server will be selected together with the Contractor, according to the individual video board requirements needed, depending on the type of tasks to be executed by the server. The products price list will be accordingly adapted (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

A.2. KVM infrastructure

A.2.1. KVM infrastructure extension

The Secretariat's audiovisual service already possesses an IHSE KVM solution (see description of existing infrastructure in Section I of the technical specifications, and Appendix 3 "Schematic block diagram VPPP 2023" for a representation of the existing VPPP workflow and infrastructure), used for taking control of servers and workstations of the Audiovisual network from one or several different locations (Matrix room, master control room, Press control room, VIP control room, Newsroom, and the Europa Building).. The IHSE KVM infrastructure will require gradual extensions with different modules depending on the KVM functionalities required.

As this concerns possible extensions of an already existing IHSE KVM infrastructure, the requested KVM modules and items must be IHSE components.

The Tenderer will give a price for all following separate elements of the IHSE KVM solution:

- the KVM matrix chassis 80 ports (manufacturer ref : K480-080-R1)
- Chassis for 2 modules, integrated power supply, setup for redundant power supply (manufacturer ref: 474-BODY2N)
- 19"-Rackmount Ears for 2-slot chassis w/ built-in PSU (manufacturer ref : 474-2NRMK)
- Chassis for 6 modules, backplane with 2 integrated power supply units on back side, hot swappable extender modules (manufacturer ref: 474-BODY6BPF)
- Chassis for 6 modules, backplane with 2 integrated power supply units on front side, pre-installed silent fan (manufacturer ref: 474-BODY6BPF-S)
- 19"-Rackmount Ears for 6-slot chassis (manufacturer ref: 474-6RMK)
- 4RU / RU / 19" rack chassis for 21 modules, two integrated power supply units, hot swappable extender modules (manufacturer ref: 474-BODY21/4UR-R1)
- Spare PSU for 21-slot chassis, slide-in, hot-swap (manufacturer ref: 474-PSU21)
- Module for IP management and monitoring (manufacturer ref: 474-SNMPV3)
- Cat X I/O module (8 ports) (manufacturer ref: 480-C8R1)
- Fiber I/O board 8 ports (manufacturer ref: 480-S8R1)
- IP Gateway (manufacturer ref: 480-IPG)
- Controller module incl. Dual TCP/IP, HDMI, USB-HID, RS232 and Genlock (manufacturer ref : 480-CTRL2)
- Fan tray for KVM matrix with 80 ports (spare part) (manufacturer ref: 480-FAN-080)
- Filter pads for KVM matrix with 80 ports (spare part) (manufacturer ref: 480-FLTR-080)
- Plug-in power supply unit for KVM matrix with 80 ports (spare part or redundancy) (manufacturer ref: 480-RED-080)
- CPU module DP 1.1, SL, USB-HID, Cat X 1G (manufacturer ref: L474-BSHC)
- CPU module DP 1.1, SL, USB-HID, fiber 1G (manufacturer ref: L474-BSHS)
- CPU module, 1x Cat X, 1x DVI-I (VGA) monitor, single-link, 2x USB-HID (manufacturer ref: L474-BVHC)
- CPU module, 1x Cat X, 2x monitors, single-link, 2x USB-HID (manufacturer ref: L482-B2HC)
- CPU module, 1x Cat X, 1x HDMI monitor, single link, 2x USB-HID (manufacturer ref: L481-BHHC)
- CPU module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Cat X 1G (manufacturer ref: L483-B2HC)
- CPU module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 1G (manufacturer ref: L483-B2HS)
- CPU module DP 1.1, SL, USB-HID, Cat X 1G (manufacturer ref: L483-BSHC)
- CPU module DP 1.1, SL, USB-HID, fiber 1G (manufacturer ref: L483-BSHS)
- CPU module, 1x Cat X, 1x SDI monitor (manufacturer ref: L486-BSDC)
- CPU module, 1x Fiber, 1x SDI monitor (manufacturer ref: L486-BSDS)

- CON module, 1x Cat X, 1x monitor, single-link, 2x USB-HID (manufacturer ref: R474-BSHC)
- CON module, 1x Fiber, 1x monitor, single-link, 2x USB-HID (manufacturer ref: R474-BSHS)
- CON module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Cat X 1G HID (manufacturer ref: R483-B2HC)
- CON module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 1G HID (manufacturer ref: R483-B2HS)
- CON module DP 1.1, SL, USB-HID, Cat X 1G (manufacturer ref: R483-BSHC)
- CON module DP 1.1, SL, USB-HID, fiber 1G (manufacturer ref: R483-BSHS)
- CON module, 1x Cat X, 1x HDMI monitor, single-link, 2x USB-HID (manufacturer ref: R481-BHHC)
- CON module, 1x Cat X, 1x SDI monitor (manufacturer ref: R486-BSDC)
- CON module, 1x Fiber, 1x SDI monitor (manufacturer ref: R486-BSDS)
- CPU module, 1x Cat X, USB 2.0 Hi-Speed (manufacturer ref: L474-BXUC)
- CON module, 1x Cat X, USB 2.0 Hi-Speed (manufacturer ref: R474-BXUC)
- CPU module, 1x Fiber, USB 2.0 Hi-Speed (manufacturer ref: L474-BXUS)
- CON module, 1x Fiber, USB 2.0 Hi-Speed (manufacturer ref: R474-BXUS)
- Add-On CPU Module USB 2.0 embedded (manufacturer ref: L474-BXE)
- Add-On CON Module USB 2.0 embedded (manufacturer ref: R474-BXE)
- Add-On CPU USB 2.0 embedded Flex Speed (manufacturer ref: L474-BXE2)
- Add-On CON USB 2.0 embedded Flex Speed (manufacturer ref: R474-BXE2)
- Support service contract for duration of 1 year, priced separately, according to the support requirements and conditions indicated in Section VI.C.1.1.3 of these tender specifications.

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-2_001** till **A-2_045**.

As the choice of KVM modules depends largely on specific KVM functionalities and connectivity options required, the Tenderer will provide the IHSE product catalogue as annex to his offer.

After contract award: whenever a KVM module is required, the exact KVM module model will be selected together with the Contractor, according to the individual functionality and connectivity requirements needed. The products price list will be accordingly adapted (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

Support requirements are indicated in Section VI.C - 'Services' of these Tender specifications. See Section VI.C.1.1.3.

A.3. Network for video broadcast environments

In order to meet the needs and the requirements of the video environment of the Secretariat's Audiovisual Service, we need reinforcement of the VPPP LAN network and ensure the network's reliability with network solutions defined for audiovisual broadcast purposes. Given the high demands of Broadcast-over-IP, the Secretariat is looking for a high-performance network.

A.3.1. Network infrastructure for video broadcast environments

Given the evolution to broadcast-over-IP networks, the Secretariat's audiovisual service requires a network with high throughput switching for the video core and Gb switching for certain specific edge devices.

A.3.1.1. Core switching infrastructure

Although the necessary switch infrastructure is normally foreseen by the Secretariat's IT service, it might be that for compatibility reasons or specification requirements their contracts do not allow to provide the necessary audiovisual broadcast network infrastructure, according to the Secretariat's Audiovisual service requirements.

Therefore, it will be possible to acquire the necessary switches through this contract in case of non-contractual coverage of the internal IT service.

Mind that any acquisition of switches will be done in coordination and cooperation with the internal IT services and their switch monitoring requirements.

For the core of the Secretariat's VPPP video network, the switches will need to be defined for audiovisual broadcast purposes, enabled to handle large jumbo video packets, PTPv2 enabled according to SMPTE standard 2059, possesses a large backbone capacity, large buffer capacity, non-blocking switches (no stacking allowed), compatible with SMPTE 2110 standard.

For compatibility reasons, as the Secretariat's audiovisual sector already has Arista switches enabling video stream transport between Brussels and Luxembourg (Arista switches connected with Lawo V_Matrix equipment), the Tenderer will propose an Arista OS compatible switch compliant to the minimum requirements.

Interoperability with existing HP switches (other switches used by the Secretariat's audiovisual service and provided by the Secretariat's IT service) will be of the utmost importance.

Minimum requirements of a core network switch:

- Arista OS compatible
- interoperable with HP switches
- 'out of band' managed switch
- non blocking, wirespeed on all ports
- cell-based, lossless switching fabric
- Ultra-deep packet buffer up to 32GB
- jumbo frame handling
- Port flexibility: 1, 10, 25, 40, 50, 100Gb ports
- minimum 48x 10/25Gb ports (for 1, 10 and 25 Gb)
- minimum 6x QSFP 100 Gb/s uplink ports (for 10, 25, 40, 50, 100Gb)
- minimum 1 Bpps
- minimum 2.0 Tbps Throughput (FDX)
- L2 switching functionalities
- L3 routing functionalities
- Mix connection possibilities (DAC, Fibre and copper): choice between copper and fibre 10/25Gb connections
- IEEE 1588 PTPv2 capable, both transparent and boundary mode
- IGMP v1/v2/v3 capable
- Protocol Independent Multicast (PIM-SM / PIM-SSM)
- Redundant and hot-swappable power-supplies and fans
- Front to back & back to front airflow possibilities
- Hardware Maintenance, priced separately, covering hardware and software support & updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year.

For example: Arista DSC-7280SR3-48YC8 model with 'A-Care Software & NBD Hardware Replacement/Same Day Ship'.

Article reference in the "Financial Tendering form (Products Price list)" (Annex V): **A-3_001** and **A-3_002**.

As the choice of switch depends largely on the number and type of ports required, the buffer size and throughput needed and the network tasks to be performed, the Tenderer will provide the Manufacturer's product catalogue of the proposed brand as annex to his offer.

After contract award: whenever a switch is required, the exact switch model will be selected together with the Contractor, according to the individual requirements needed, depending on the type of network tasks to be executed. The products price list will be accordingly adapted (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

The necessary attributes (like SFP, SFP+, QSFP) will be listed and priced by the Tenderer in Section VI.A.3.2 of these tender specifications.

A.3.1.2. Gb Switching infrastructure

For certain specific edge devices, the Secretariat requires specific 1 Gb switches. These switches will be AV production oriented and extremely easy to set up and configure. The switches must be compatible and interoperable with existing network infrastructure.

For the user access (edge switching), the Tenderer will propose 2 types of 1Gb switches: a 40 port and a 30 port switch.

a) Minimum requirements of the 40 port Gb switch:

- 1 Gigabit Primary Port Speed
- 48 Ports (40x 1G PoE++, 8x SFP+)
- 40 PoE++ (90W/port), 2,880W Budget
- Enhanced IGMP Support
- Jumbo Frame Support up to 12kb
- AVB Support
- Hardware Maintenance, priced separately, covering hardware and software support & updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year.

For example: Netgear AV Line M4250-40G8XF-PoE++ (GSM4248UX).

b) Minimum requirements of the 30 port Gb switch:

- Ethernet connectivity: 24 x RJ45 connectors (1Gbps)
- Fiber connectivity: 6 x SFP+ cages (1Gbps) (independent from other ports)
- Serial: 1 x USB C
- support for link redundancy and link aggregation
- support for VLAN segmentation (groups)
- PoE supply on all ports
- supported protocols: Dante, Ravenna/AES67, Artnet, PoE and PoE+
- Memory: 4Gb
- MAC address table: 16000 entries
- Switching throughput: 60 Gbps
- IGMP support (V1/V2/V3)
- IGMP snooping (enabled by default)
- Port sensing: Auto negotiation
- Auto crossover: MDI / MDIX
- Colored RGB LEDs providing input on status (Global status and Port status)
- built-in web server for configuration
- support for profile management

- Hardware Maintenance, priced separately, covering hardware and software support & updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year.

For example: Luminex GigaCore 30i-1Gb.

The Tenderer will give a price for:

- a 40 port Gb switch
- Hardware Maintenance for the 40 port Gb switch
- a 30 port Gb switch
- Hardware Maintenance for the 30 port Gb switch

Article reference in the "Financial Tendering form (Products Price list)" (Annex V): **A-3_003** till **A-3_006**.

As the choice of switch depends largely on the number and type of ports required and the network tasks to be performed, the Tenderer will provide the Manufacturer's product catalogue of the proposed brand(s) as annex to his offer.

After contract award: whenever a switch is required, the exact switch model will be selected together with the Contractor, according to the individual requirements needed, depending on the type of network tasks to be executed. The products price list will be accordingly adapted (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

The necessary attributes (like SFP's) will be listed and priced by the contractor in Section VI.A.3.2 of these tender specifications.

A.3.2. Various network accessories/supplies/connectivity supplies (network glue)

The Tenderer will propose network related material and supplies, compatible with the proposed hardware and solutions.

This proposal will include:

- Host Bus Adapters
- Network cards for build-in into servers and workstations, taking into account 10Gb Ethernet via fibre or copper (10GBASE-T)
- Small form-factor pluggable transceiver (SFP and SFP+)

The Tenderer will give a price for:

- HBA
- 10Gb Ethernet copper Network cards, the same as proposed with the 'general audiovisual server' hardware in A.1.2.1.
- 10Gb Fibre Network cards, compliant with the proposed 'high-end audiovisual server' hardware in A.1.2.2
- SFP 1GbE 1000Base-T, compatible with proposed core and Gb network switches
- SFP 1G optical single mode, compatible with proposed core and Gb network switches
- SFP+ 10G optical single mode (100m), compatible with proposed core network switch
- SFP+ 10G copper, compatible with proposed core network switch
- SFP 25G optical single mode (70m), compatible with proposed core network switch
- QSFP 40G optical single mode (100m), compatible with proposed core network switch
- QSFP 100G optical single mode (70m), compatible with proposed core network switch

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-3_007** till **A-3_016**.

After contract award: whenever network glue is required, the exact network glue product and model will be selected together with the Contractor, according to the individual requirements needed. The products price list will be accordingly adapted (See as well Section VII 'Financial Tendering Form (Products Price List)' related to Products Price list updates).

A.4. Cinegy Archiving solution.

Although the necessary archiving solutions (HSM and LTO tape libraries) are normally foreseen by the Secretariat's IT service, it might be that for compatibility reasons or specification requirements their contracts do not allow to provide the necessary for audiovisual broadcast MAM integration (HSM) and/or archiving (LTO tape libraries), according to the Secretariat's Audiovisual service requirements.

Therefore it will be possible to acquire the necessary archiving products through this contract in case of non-contractual coverage of the Secretariat's IT service.

Mind that any acquisition of archiving products will be done in coordination and cooperation with the internal IT services.

The Tenderer will propose an integrated solution for UHD and HD video archiving, combining automated asset management via Cinegy Archive MAM functionalities with Xendata HSM functionalities.

The solution will consist of a powerful appliance optimized for video applications, and a LTO-8 tape library, with Cinegy software and Xendata software providing the necessary integration and automation.

The solution will also provide for a connection to Azure cloud (Azure blob storage) for cloud backup of Cinegy Archive MAM SQL database and LTO archive metadata.

Minimum requirements for the Cinegy archiving solution:

- integrated archive solution: 1 appliance for automation, management and control (MAM and HSM) and a LTO-8 tape library
- appliance:
 - o OS: Windows Server 2012 R2
 - o 16 core (two 8-core Intel Xeon processors or equivalent)
 - o 64GB RAM
 - o 2x 10GbE SFP+ ports, with 2 SFP+ transceivers included
 - o dual redundant PSU
 - o mirrored boot system disk drives
 - o 4x 800GB SSD's for LTO disk cache in RAID5 (usable capacity of 2.4TB)
- Azure cloud connectivity: 100GB Azure blob storage available
- LTO-8 library:
 - o 326TB LTO-8 library
 - o 2 LTO-8 drives
 - o 28 slots
 - o dual redundant power supplies
 - o direct attached to appliance/server
- software:
 - o Xendata Archive Series software license included and installed on appliance: for HSM integration with Cinegy MAM and LTO library management.
 - o Cinegy software pre-installed on appliance (license not included): Cinegy Archive S, Cinegy Convert with Convert MAM integration, Cinegy Desktop (4 users)

- Maintenance (support), priced separately, covering hardware support (onsite support from HPE for the server, advanced exchange for the LTO library and disks), remote technical support from XenData, and all software upgrades for duration of 1 year

For example: Cinegy Platform One.

The Tenderer will give a price for:

- Cinegy archiving solution
- Hardware Maintenance for the Cinegy archiving solution

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-4_001** and **A-4_002**.

A.5. Live cellular transceiver solution.

During missions, the Secretariat's audiovisual service must be able to retrieve live content filmed by the cameraman on site.

A solution of transmission by cellular cards is essential, because we don't always have fixed (cabled) infrastructures on site.

The reception and decoding solution must be carried out by an on premise server with all the features necessary for integration into the workflow.

A.5.1. Live cellular transmitter solution

A.5.1.1. Live cellular Transmitter

The Tenderer will propose a mobile video encoder and transmitter designed for live broadcasting.

Minimum requirements for the Live cellular transmitter solution:

VIDEO:

- Standards:
 - o UHD: 2160p60/50/30/25
 - o HD: 1080p60/50/30/25 1080i60/50 720p60/50
- Density:
 - o Single UHD/HD
 - o Quadruple HD
- Encoding:
 - o H.265/HEVC 4:2:0/4:2:2 8/10-bit
 - o H.264/AVC 4:2:0, 8-bit
 - o Dynamic resolution adjustment
 - o High Dynamic Range (HLG & PQ)
- Bitrates:
 - o 2 Mbps to 80 Mbps for UHD
 - o 300 Kbps to 20 Mbps for HD
 - o Constant Bitrate (CBR)
 - o Variable Bitrate (VBR)
- Inputs: SDI

AUDIO:

- Encoding: AAC-LC
- Bitrates: 32 Kbps to 256 Kbps

- Mode: Mono, Stereo
- Density: Up to 4 Mono or up to 4 Stereo
- Inputs: Embedded over SDI

NETWORK CONNECTIONS:

- Cellular: 6 x 3G/4G/5G world-wide compliant modems
 - o Sub 6GHz bands
 - o SA (Stand Alone) and NSA (Non Stand Alone)
 - o Internal high efficiency antennas
- Ethernet: 2 x Gigabit Ethernet ports
 - o LAN, WAN
 - o portable satellite (Ka & Ku Band)
- Wi-Fi: Dual band Wi-Fi modem 802.11a/b/g/n/ac (2.4GHz and 5 GHz)
 - o Client & Hot Spot modes
 - o High-efficiency embedded antenna
- Transport Protocol
 - o SST over Cellular/Ethernet/WiFi (bonding)
 - o SRT over Ethernet

INTERFACES:

- 1 x 12G/3G-SDI input and 3 x 3G-SDI inputs (BNC)
- 1 x 12G-SDI output (BNC)
- 1 x HDMI 1.4 output
- 1 x GenLock input (BNC)
- 2 x RJ-45 Ethernet
- 2 x USB 3.0 (type-A), 1 x USB 3.0 (type-C)
- 6 x micro SIM slots
- 1 x mini jack for IFB/intercom headset
- 1 x micro SD card slot

CONTROL & MONITORING:

- Embedded touch screen
- Web UI from any browser
- From receiver server
- From Manager software

POWER:

- DC input 18V
- External battery with V-mount plates

PHYSICAL:

- Dimensions (W x H x D): $\leq 30 \text{ cm} \times 10 \text{ cm} \times 15 \text{ cm}$
- Weight: $\leq 1.5 \text{ Kg}$

OTHER FEATURES:

- Dual encoding for simultaneous Live & Record (single HD mode)
- Sub second glass-to-glass latency (down to 200 ms in single encoder mode and down to 500 ms in multi-encoder mode)
- Video and Audio level preview
- Intercom/IFB

- Video return from Studio (full HD, sub-second latency)
- Automatic Live Start
- Networks Links priorities (user configurable)
- Data Bridge for switching the device as mobile router
- Simultaneous Live and IP traffic (for remote camera control)
- Geolocation (GPS)
- SMPTE-12M timecode passthrough

HARDWARE MAINTENANCE:

- Hardware Maintenance, priced separately, covering hardware and software premium support & updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year.

For example: Haivision Pro460 S-PRO460-V-PEL

The Tenderer will give a price for:

- A live cellular Transmitter
- Hardware Maintenance for the live cellular Transmitter

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-5_001** and **A-5 002**.

A.5.1.2. Live cellular Transmitter options

The Tenderer will give a price for:

- Standard Backpack with V-mount plate, compliant with the proposed Live cellular transmitter (for example : Haivision AW-OT-BPV3)
- V-mount battery for the live cellular Transmitter, compliant with the proposed Live cellular transmitter (for example : Haivision AW-OT-VMB)
- V-mount battery charger for proposed V-mount battery, compliant with the proposed Live cellular transmitter (for example : Haivision AW-OT-VMC)

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **A-5_003** till **A-5 005**.

A.5.2. Live receiver solution

The Tenderer will propose a versatile solution for receiving IP video streams over mobile networks and the internet.

Minimum requirements for the Live receiver solution:

PLATFORM:

- Physical: 1 RU server platform
- Software: Linux 64-bit server
- Available as a virtual machine or Docker Instance Deployable on Azure or other cloud platforms

VIDEO:

- Resolutions:
 - o 4K/UHD: 25/30/50/60
 - o HD: 1080p 25/30/50/60 - 1080i 50/60 - 720p 25/30/50/60
 - o SD: PAL, 480p, 576p
- Decoding:

- Codec: H.264/AVC (4:2:0 8-bit), H.265/HEVC (up to 4:2:2 10-bit)
- Bitrates: 100 Kbps up to 160 Mbps
- Regulation mode: VBR and CBR
- Up to 8x HD or 1x 4K decoding
- Encoding:
 - Codec: h.264/AVC 4:2:0 8bits
 - Bitrates: 100 kbps up to 20 Mbps
 - Regulation mode: CBR
 - Up to 8 HD live encoding
- Processing:
 - Video Down-scaling & Upscaling
 - Deinterlacing

AUDIO:

- Decoding:
 - AAC-LC, AAC-HE v2
 - MPEG-1 L2, OPUS
- Encoding:
 - AAC-LC, MPEG1-L2, OPUS

STREAMING PROTOCOLS:

- Inputs: TS/IP (SPTS), RTSP/RTP, RTMP push and pull, HLS, SRT, SST (IP and cellular bonding), NDI IGMPv3 & SSM for TS multicast input
- Outputs: TS/IP (SPTS), RTSP/RTP, RTMP, RTMPS push and pull HLS, SRT, SST (IP and cellular bonding), NDI

PHYSICAL INTERFACES:

- Dual GigE network interfaces
- 4 x 3G-SDI outputs (SD/HD) with genlock

MONITORING:

- Web-based GUI
- Comprehensive REST API for third-party management system integration

POWER:

- Redundant power supply

HARDWARE MAINTENANCE:

- Hardware Maintenance, priced separately, covering hardware and software premium support & updates and hardware replacement and/or repair in case of failure, with a 'next business day' SLA for duration of 1 year.

For example: Haivision StreamHub Standard AW-SH2

The Tenderer will give a price for:

- A live Receiver
- Hardware Maintenance for the live Receiver

Article reference in the "Financial Tendering form (Products Price list)" (Annex V): **A-5_006** and **A-5_007**

B. Software.

The acquisition price of the software licenses from the Products Price list includes delivery, preparation, installation, integration into the existing infrastructure and into the existing workflow, configuration and putting into production.

The acquisition price of the software will cover the software license fee, including support and software updates and upgrades - or a specific SLA with special (support) conditions - during the 1st year unless otherwise specified in the individual product or support descriptions/conditions.

A copy of the software SLA support contract, according to the (specific) support conditions as described under Section VI.C 'Services' of these tender specifications, between Manufacturer and Contractor will be provided to the Secretariat upon acquisition and/or yearly renewal of software license fees.

The Secretariat will be clearly mentioned as end-client in the support contracts between the Contractor and the Manufacturer and a separate support login and credentials will be created for the Secretariat. It will be possible for the Secretariat audiovisual service's staff to create and reply to support tickets with the Manufacturer.

See more information about different SLA contract conditions for some products in Section VI.C 'Services' of these Tender Specifications.

Any software acquired by the Contractor will be registered at the name of the Secretariat, including online purchases. The license information (number and conditions) will be provided to the Secretariat.

Annual renewal of license fees (renewals for support and software updates and upgrades and, when specified, according to the specific SLA support conditions as described under Section VI.C of these tender specifications) will be marked separately in the Products Price list for the following years.

B.1. Cinegy Software Licenses.

The secretariat VPPP is equipped with the Cinegy software suite.

As this is the core of the system, the products offered in this section must be Cinegy software products.

Cinegy is an integrated, database driven, end-to-end, UHD/HD/SD, digital media production and management system. Based on standard PC hardware and IT infrastructure, Cinegy is a modular, open platform consisting of a suite of tools, applications and open APIs.

It also integrates fully with traditional production and post-production processes, including non-linear editing systems - like Avid, Final Cut and Adobe Premiere -, and can be implemented without requiring investment in a completely new infrastructure.

Cinegy will allow operating a future-facing, software-based, IP-oriented (compatible with broadcast video stream standards and protocols), commodity platform.

Any Cinegy module must properly integrate into the Secretariat's audiovisual service existing workflow.

All necessary technical documentation can be found on the web site of the manufacturer Cinegy (link at the time of the publication of this call for tender : <https://open.cinegy.com>). For information about service and training level conditions and requirements for Cinegy products and support, see Section VI.C.2.1 'Cinegy Specific Service level and support conditions'.

B.1.1. Cinegy License acquisition.

The license acquisition price will take into account the SLA according to the specifications as described in Section VI.C.2.1.

The Tenderer will provide a price for the following software licenses:

- Cinegy Archive Enterprise - cluster enabled MAM database with MS SQL Enterprise support
- Multi-database option for Cinegy Archive
- Archive Browser - for cinegy archive access in 3rd party apps
- Desktop Single client access license
- Workspace 10 client access license pack
- Workspace Server
- Capture Pro Base
- Capture Pro Channel
- Capture Pro Archive Adapter - direct integration with Cinegy Archive MAM
- Capture Pro AVID DNxHD/HR codec option
- Convert - with 8 Convert Agents
- Convert Agents 8 pack - additional 8 Convert Agents
- Convert Cinegy MAM plugin - direct integration with Cinegy Archive MAM
- Convert AVID DNxHD/HR codec option
- Air Bundle - with Cinegy Titler, Dolby Digital, DNxHD - includes Studio and News
- Cinegy Encode
- Cinegy Route
- Cinegy Live
- Cinegy StreamSwitcher
- Cinegy Multiviewer Base
- Cinegy Multiviewer Channel
- Cinegy Multiviewer 16 Channels
- Cinegy OPS pack - 24 Cinegy Multiviewer Channels, Cinegy Route plus Cinegy telemetry service

Article references for acquisition of Cinegy licenses in the “Financial Tendering form (Products Price list)” (Annex V): **B-1_001** till **B-1_023**.

Support requirements for Cinegy products are indicated in Section VI.C 'Services' of these Tender specifications. See Section VI.C.2.1.

Cinegy Professional services requirements are indicated in Section VI.C 'Services' of these Tender specifications and priced separately. See Section VI.C.2.2.

B.1.2. Cinegy annual license renewal fee.

For any of the above-mentioned Cinegy licenses, the Tenderer will list an annual license renewal fee. These annual license renewal fees will cover the related SLA conditions as described in Section VI.C.2.1 for Cinegy support and software updates and upgrades.

Article references for the Cinegy annual license renewal fees in the “Financial Tendering form (Products Price list)” (Annex V): **B-1_101** till **B-1_123**.

Nota bene: The proposed price of each of the above mentioned annual license renewal fees, will remain fixed for the entire duration of the framework contract (not subject to any price revision).

Support requirements for Cinegy products are indicated in Section VI.C 'Services' of these Tender specifications. See Section VI.C.2.1.

The contractor will provide the Secretariat with a clear overview of all licenses and the date when they are due for renewal. This can be done via a regularly updated document or via a web platform.

B.2. FileCatalyst accelerated file transfer software.

A FileCatalyst Direct and FileCatalyst Central system are already part of the existing VPPP, as described in Section I of the technical specifications, and Appendix 3 "Schematic block diagram VPPP 2023" for a representation of the existing VPPP workflow and infrastructure. Any additional FileCatalyst software module must properly integrate into the Secretariat's audiovisual service existing workflow and already existing infrastructure.

B.2.1. FileCatalyst License acquisition.

B.2.1.1. *FileCatalyst Workflow.*

FileCatalyst Workflow is a web portal for all file transfer needs. It simplifies file exchange and streamlines submission, distribution, and file sharing workflows on the web.

Users can submit files for processing, with full tracking at every stage.

Users can as well securely distribute files to anyone with an email address (similar to WeTransfer modus-operandi but with the difference that it is secure and tracked).

Files are sent via FileCatalyst Workflow to the FileCatalyst Server using acceleration technology. Recipients then receive an email for downloading the files. All phases of the file transfer are tracked and managed.

Used for submission, FileCatalyst Workflow creates a web portal for uploading files and also collects any information (metadata) needed to process those files. Files and metadata combined are called a "job". Jobs may go through any number of phases while being tracked through the system until finally reaching the completed state.

With FileCatalyst Workflow as the central storage location for one or more web folders, users have remote access to shared or personal files from anywhere in the world. Both upload and download are supported, and sharing can be at individual account or group levels. Group folders with individual read/write permissions can be assigned to any number of users.

Combining FileCatalyst Direct with FileCatalyst Workflow provides a complete accelerated web-based solution.

FileCatalyst Workflow: according to the current specifications of the manufacturer, the software fulfils the following requirements:

- Web portal for sharing, submission & distribution
- Online file sharing and collaboration
- Customizable metadata fields
- Authentication: LDAP/AD compatible
- Automated job submission via FileCatalyst HotFolder
- supports email distribution and notifications to (multiple) users with download link
- support for all web browsers
- templating system for easy customization of end-user pages.
- supports group templating for specific template creation for a group or department.
- no end user software download or installation needed
- smartphone (iOS and Android) support with FileCatalyst app

- Receive and send large files via web portals
- Password protected submission portals or set up "anonymous" drop boxes for Guest profiles.
- accelerated file transfer to any email address

Article references for acquisition of FileCatalyst Workflow license in the “Financial Tendering form (Products Price list)” (Annex V): **B-2_001**.

Support requirements for the FileCatalyst products are indicated in Section VI.C 'Services' of these Tender specifications. See Section VI.C.1.1.4.

B.2.1.2. *FileCatalyst Reverse Proxy.*

FileCatalyst Reverse Proxy allows a FileCatalyst Server to be completely isolated behind a firewall, with no incoming ports open and still be accessible to FileCatalyst Client applications. The FileCatalyst Server connects out via TCP to the FileCatalyst Proxy to establish a back channel. FileCatalyst clients can connect to the FileCatalyst Reverse Proxy as though it was a FileCatalyst Server. The proxy will handle all routing of both TCP and UDP connections between the client and the FileCatalyst Server.

FileCatalyst Reverse Proxy: according to the current specifications of the manufacturer, the software fulfils the following requirements:

- compatible with existing FileCatalyst solution
- complete isolation of FileCatalyst Server but without compromising on ease-of-use and accessibility.
- Proxy handles all routing of TCP and UDP connections between clients and FileCatalyst Server
- support for specific IP binding for the sever facing TCP port, the client facing TCP port and the UDP port.
- compatible with Network address translation (NAT) devices: support for IP masquerade address
- supports SSL certificates
- built for DMZ environments

Article references for acquisition of FileCatalyst Reverse Proxy license in the “Financial Tendering form (Products Price list)” (Annex V): **B-2_002**.

Support requirements for the FileCatalyst products are indicated in Section VI.C 'Services' of these Tender specifications. See Section VI.C.1.1.4.

B.2.2. FileCatalyst annual license renewal fee.

For any of the above-mentioned FileCatalyst licenses, the Tenderer will list an annual license renewal fee. This list will also include the annual license renewal fee for the existing FileCatalyst solution: FileCatalyst Direct 500Mbps all inclusive plus FileCatalyst Central Classic.

These annual license renewal fees will cover the related SLA conditions as described in Section VI.C.1.1.4. for FileCatalyst support and software updates and upgrades.

Article references for the FileCatalyst annual license renewal fees in the “Financial Tendering form (Products Price list)” (Annex V): **B-2_101** till **B-2_103**.

Nota bene: The proposed price of each of the above mentioned annual license renewal fees will remain fixed for the entire duration of the framework contract (not subject to any price revision).

The contractor will provide the Secretariat with a clear overview of all licenses and the date when they are due for renewal. This can be done via a regularly updated document or via a web platform.

B.3. Post-production effect plugins.

B.3.1. Post-production effect plugins license acquisition.

The Secretariat possesses 5 Maxon Red Giant Complete plugin licenses. The Secretariat may have to extend the number of licences.

The Tenderer will give a price for a Maxon Red Giant Complete plugin license.

Article reference for the 'Post-production effect plugins license acquisition' in the "Financial Tendering form (Products Price list)" (Annex V): **B-3_001**.

B.3.2. Post-production effect plugins annual license renewal fee.

The Tenderer will give a price for the annual license renewal fee for the existing Maxon Red Giant Complete plugin license.

This annual license renewal fee will cover the support and software updates and upgrades.

Article references for the 'Post-production effect plugins annual license renewal fee' in the "Financial Tendering form (Products Price list)" (Annex V): **B-3_101**.

B.4. 3D graphics and animation compositing/editing annual license renewal fee.

The Tenderer will give a price for the annual license renewal fee for the existing Maxon ONE software license.

This annual license renewal fee will cover the support and software updates and upgrades.

Article references for the Maxon ONE annual license renewal fee in the "Financial Tendering form (Products Price list)" (Annex V): **B-4_001**

B.5. Sony Wireless video workflow annual subscriptions.

The Secretariat possesses a Sony PXW-Z280 camera with Sony C3 Portal XDCAM wireless video workflow functionalities. The Secretariat will be able to extend those functionalities. The price for the annual subscriptions will include Sony support.

The Tenderer will price the following Sony C3 Portal (XDCam wireless) licenses and options:

- XDAIRCAMERA – Camera licence to register and use a camera with the XDCam air services. Mandatory for every camera – not floating.
- XDAIRMETA – Camera licence addition to be able to send metadata from XDCam air cloud platform to a camera (also enables sending metadata to users)
- XDAIRLIVE – Live licence. One licence required per simultaneous stream from any camera. Includes the creation of any number of virtual RX (RTMP or MPEG2

destinations), and includes a 100GB data throughput allowance per month (approx. 44 hours@6mbps).

- XDAIRHEVC – Camera licence addition to enable h.265 codec in supported cameras. Currently also requires user to purchase PWS-110RX1A
- XDAIRPOCKET – Allows for five XDCam pocket iOS or Android apps to be registered to the XDCam air system. Also includes 50GB of throughput streaming data. Also enables app file transfers to the XDCam air CMS. Pocket instances can be de-registered and then reassigned to different serial numbers. App itself is free on Apple App Store and Google Play.
- XDAIRCMS – Enables XDCam air Content Management Features, including logging, subclipping and simple editing in the cloud, EDL export, full/partial clip “pull” in both low- and high-bitrate. Includes 1TB storage
- XDAIRLIVEOV – Charged ad-hoc for over-use of streaming quotas (100GB as defined in XDAIRLIVE)
- XDAIRCMSOV – Charged ad-hoc for over-use of storage allowances (1TB standard as defined in XDAIRCMS)

Article references for the **annual subscriptions including Sony support** for 'Sony Wireless video workflow' in the “Financial Tendering form (Products Price list)” (Annex V): **B-5_001** till **B-5_008**.

B.6. Video network and system monitoring solution (KYBIO) Annual renewal fee.

The Secretariat possesses the Worldcast Kybio system monitoring solution.

The Tenderer will give a price for the annual renewal fee for the existing KYBIO software license (Kybio Media 2500 Worldcast Manager Perpetual license (Connect SW-WCM-COR3-2500-P).

These annual renewal fees will cover the related SLA conditions as described in Section VI.C.1.1.5. for Worldcast Kybio Video Network and System Monitoring support and software updates and upgrades.

Article references for the 'Worldcast Kybio Video network and system monitoring solution annual renewal fee' in the “Financial Tendering form (Products Price list)” (Annex V): **B-6_001 & B-6_002**.

Nota bene: The proposed price of each of the above mentioned annual license renewal fees will remain fixed for the entire duration of the framework contract (not subject to any price revision).

B.7. Cantemo software licenses

B.7.1. Cantemo license options acquisition

The Secretariat possesses a Cantemo MAM Solution. The Secretariat may have to extend functionalities.

The Tenderer will price the following Cantemo licenses options:

- Cantemo Portal 20 User Pack
- Adobe Premiere Pro - 10 User Pack Integration

Article references for acquisition of Cantemo licenses in the “Financial Tendering form (Products Price list)” (Annex V): **B-7_001** till **B-7_002**.

B.7.2. Cantemo annual renewal fee

The Tenderer will give a price for the annual ‘Cantemo Advanced Support’ renewal fee for the existing Cantemo software license.

This annual renewal fee will cover support and software updates and upgrades.

Article reference for the Cantemo Advanced Support annual renewal fee in the “Financial Tendering form (Products Price list)” (Annex V): **B-7_101**.

Nota bene: The proposed price of the above mentioned annual license renewal fee will remain fixed for the entire duration of the framework contract (not subject to any price revision).

B.8. Pulse-IT (Embrace) software licenses

B.8.1. Pulse-IT (Embrace) License acquisition

The Secretariat possesses a Pulse-IT workflow automation Solution. The Secretariat may have to extend the number of worker nodes.

The Tenderer will price the following Pulse-IT option licence :

- Pulse-IT pack for 2 additional worker nodes to run on the Pulse-IT base system.

Article reference for acquisition of Pulse-IT option license in the “Financial Tendering form (Products Price list)” (Annex V): **B-8_001**.

B.8.2. Pulse-IT (Embrace) annual license subscription fee

The Tenderer will give a price for the annual license subscription fees for the existing Pulse-IT software licenses.

These annual license subscription fees will cover the support and software updates and upgrades.

The Tenderer will price the following Pulse-IT annual license subscriptions:

- Embrace Pulse-IT - Base system license subscription
- Embrace Pulse-IT - Cantemo Portal application integration license subscription

Article reference for the Embrace Pulse-IT annual license subscription fees in the “Financial Tendering form (Products Price list)” (Annex V): **B-8_101** till **B-8_102**.

Nota bene: The proposed price of each of the above mentioned annual license renewal fees will remain fixed for the entire duration of the framework contract (not subject to any price revision).

B.9. Remote connection AnyDesk On Premise software solution

B.9.1. AnyDesk additional user license acquisition

The Secretariat possesses an Anydesk On Premise remote connection Solution. The Secretariat may have to extend the number of users.

The Tenderer will price the following additional user licence :

- AnyDesk On Premise additional user licence.

Article reference for acquisition of AnyDesk On Premise additional user licence in the “Financial Tendering form (Products Price list)” (Annex V): **B-9_001**.

B.9.2. AnyDesk On Premise annual license renewal fee

The Tenderer will give a price for the annual license renewal fee for the existing AnyDesk On Premise software license.

This annual license renewal fee will cover the support and software updates and upgrades.

Article reference for acquisition of AnyDesk On Premise annual license renewal fee in the “Financial Tendering form (Products Price list)” (Annex V): **B-9_101**.

Nota bene: The proposed price of the above mentioned annual license renewal fee will remain fixed for the entire duration of the framework contract (not subject to any price revision).

B.10. Quality Checker software

B.10.1. Quality Checker software acquisition

Minimum requirements of the quality checker software:

- Compatible with existing infrastructure.
- Single pass analysis
- Allow comparative analysis
- Up to 4 concurrent files
- Analyze from Network Shares
- Advanced timeline inspection
- Quick analysis option
- Provide reports in several different formats (HTML, PDF, XML or Json)
- Highly visual, intuitive and easy to use interface that runs in a web browser.
- Define, save and share unlimited custom templates
- Multi-step processes, manually triggered or automated
- RESTFul API for seamless integration with third party applications
- Email notifications
- Run on-premise, in the cloud, or in hybrid environments.

For example: LWKS QScan Pro 4.

The Tenderer will give a price for the quality checker software license.

Article reference for acquisition of quality checker software license in the “Financial Tendering form (Products Price list)” (Annex V): **B-10_001**.

B.10.2. Quality Checker annual renewal fee

The Tenderer will give a price for the annual renewal fee for the proposed Quality Checker software license.

This annual renewal fee will cover the support and software updates and upgrades.

Article reference for the Quality Checker annual renewal fee in the “Financial Tendering form (Products Price list)” (Annex V): **B-10_101**.

Nota bene:The proposed price of the above mentioned annual license renewal fee will be fixed for the entire duration of the framework contract (not subject to price revision).

B.11. Data Centric Artificial Intelligence (AI) Platform (Software)

Following a study carried out and the development of a data and AI strategy, the GSC is exploring different options to integrate a data-centric semantic platform that allows to use AI-based solutions as microservices in its audiovisual workflow. As part of this work, the Secretariat is currently running a Proof of Concept (PoC) with 'Perfect Memory'. While the preliminary results are promising, the envisaged option is not yet known as this PoC is still ongoing at the time of the publication of this call for tenders. The tenderers are therefore invited to propose a data centric AI software, meeting all the Minimum requirements described below.

B.11.1. Data Centric AI Platform software acquisition

Minimum requirements of the Data Centric AI software:

- Data Centric platform allowing to exploit data from external data sources, as well as from internal ones, such as existing applications (e.g. Cinegy MAM) and databases through data connectors / data pipelines
- Semantic layer for quick access to our data sources
- Services to build data pipelines/connectors as needed to integrate the platform in the existing workflow
- Ability for the platform to call microservices, in particular free or commercial AI engines
- Automatic metadata collection in existing workflow (MAM, CMS, web pages, Wikidata ...).
- Automatic metadata enrichment through client's data sources, ontologies, or via third-party Artificial Intelligence engines (speech to text, translation, object recognition, ...)
- Automatic reinjection of enriched and processed metadata into the workflow (MAM, CMS, ...)
- Collaborative platform
- Easy and intuitive Back-end
- Front-end available
- Semantic search
- Automatic update of search facets based on selected search results
- Saved searches
- Assets navigation
- Advanced timeline presentation
- Editorial rights management.
- Plugin for Adobe Premiere
- Possibility to run on-premise, in the cloud, or in hybrid environments.
- ISO security

- Version control and easy maintenance for scalability

For example: Perfect Memory.

The Tenderer will give a price for the Data Centric AI Platform software license

Article reference for acquisition of Data Centric AI Platform software license in the “Financial Tendering form (Products Price list)” (Annex V): **B-11_001**.

B.11.2. Data Centric AI Platform software annual renewal fee

B.11.2.1. *Data Centric AI Platform software annual renewal fee for the proposed solution in B.11.1*

The Tenderer will give a price for the annual renewal fee for the Data Centric AI Platform software license proposed in B.11.1.

This annual renewal fee will cover the support and software updates and upgrades.

Article reference for the Data Centric AI Platform software annual renewal fee in the “Financial Tendering form (Products Price list)” (Annex V): **B-11_101**.

In the ‘Financial Tendering Form (Products Price list)’, there are 2 years indicated as estimated volume under point B.11.2.1 and point B.11.2.2. However, the Secretariat will only require 1 of the 2 renewals for a total duration of 4 years, depending on the chosen AI software solution. The total renewal volume of 4 years has been distributed over both renewals (each 2 years) to obtain a weighted representation in the GRAND TOTAL.

B.11.2.2. *Perfect Memory software annual renewal fee*

In the event that the results of the POC are conclusive, and that the integration of the Perfect Memory solution would take place before the signing of this FWC, this solution would therefore be part of the core of the system.

The Tenderer will give a price for the annual renewal fee for the Perfect Memory software license.

This annual renewal fee will cover the support and software updates and upgrades.

Article reference for the Perfect Memory software annual renewal fee in the “Financial Tendering form (Products Price list)” (Annex V): **B-11_102**.

In the ‘Financial Tendering Form (Products Price list)’, there are 2 years indicated as estimated volume under point B.11.2.1 and point B.11.2.2. However, the Secretariat will only require 1 of the 2 renewals for a total duration of 4 years, depending on the chosen AI software solution. The total renewal volume of 4 years has been distributed over both renewals (each 2 years) to obtain a weighted representation in the GRAND TOTAL.

B.11.3. Artificial Intelligence Engines subscriptions

The Tenderer will give a price for the use of different engines with the Data Centric AI Platform software license:

- Speech to text, price per hour (for example Speechmatics)
- Translation, price per thousand words. For reference, in case needed for conversion between hours and words: 1 hour = 9000 words.
- Face recognition (Photos), price per 1000 images

Article reference for the Artificial Intelligence engines subscriptions in the “Financial Tendering form (Products Price list)” (Annex V): **B-11_201** till **B-11_203**.

B.12. Live receiver software options for the proposed Live receiver solution (see A.5.2.)

B.12.1. Live receiver software options licence acquisition

The Tenderer will give a price for:

- NDI Output Licence, compliant with the proposed Live receiver (for example : Haivision AW-OR-NDI-OUT)
- IP output license, compliant with the proposed Live receiver (for example : Haivision AW-OR- OIP)

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **B-12_001** and **B-12_002**.

B.12.2. Live receiver software options licence annual subscriptions and annual renewal fee

B.12.2.1. Live receiver software options licence annual subscriptions

This annual subscription fee will cover the support and software updates and upgrades.

The Tenderer will give a price for:

- MoJo input license (1 user) annual subscription, compliant with the proposed Live receiver, with the following minimum requirements :
 - o VIDEO Resolutions : 1920 x 1080 1280 x 720
 - o Frame rates : 25/30fps 50/60fps
 - o Encoding : H.264/AVC 4:2:0, 8-bit - H.265/HEVC 4:2:0, 8-bit
 - o Bitrates : Up to 10 Mbps Constant Bitrate (CBR) Variable Bitrate (VBR)
 - o Inputs : Built-in cameras
 - o AUDIO Encoding : AAC-LC - 32 kbps, 64 kbps, 128 kbps or 256 kbps Mono / Stereo
 - o Inputs : Built-in & external microphone (wired/Bluetooth)
 - o Cellular: 5G/4G/3G (depending on device and operator) – WiFi - Ethernet (with an adaptor) - BGAN satellite
 - o network aggregation between Cellular, Wifi and Ethernet
 - o PLATFORM : *iPhone (iOS 12 to 16)* 8, 8 Plus X, XS, XR, Xs Max 11, 11 Pro, 11 Pro Max 12, 12 Pro, 12 Pro Max 13, 13 Pro, 13 Pro Max SE – *iPad - MacBook (with M1 & M2 chipsets)*

For example : Haivision AW-OR-MOJ-365

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **B-12_003**

B.12.2.2. Live receiver software options support annual renewal fee

This annual renewal fee will cover the support and software updates and upgrades.

The Tenderer will give a price for:

- NDI Output Licence annual renewal fee (see B.12.1)
- IP output license annual renewal fee (see B.12.1)

Article reference in the “Financial Tendering form (Products Price list)” (Annex V): **B-12_101** and **B-12_102**

C. Services.

C.1. General Services.

The Contractor will have a web-based service ticketing system, allowing request for and tracking of support and maintenance, available with the following specifications:

- ticket creation and modification via web interface by Secretariat audiovisual staff and by the Contractor's staff;
- automatic ticket creation when sending an email to a specific helpline email address;
- automatic date and time registration of ticket creation and replies;
- distinction between support and maintenance service by checking a box in the ticket interface;
- per ticket, indication of intervention channel via which the Contractor took action(s) to remedy the issue: telephone support (indication of time of call and Secretariat person who was contacted), remote connection (time of remote connection and to which machine); on-site intervention (time of on-site intervention and name of Contractor's staff member)
- distinction/indication of urgency and severity of problem (normal, high and critical: normal= annoying but non-blocking for system function/normal workflow; high= impossible to apply normal workflow; workaround necessary; critical= system(s) down/unavailable; impossible to work.)
- email notification to designated Secretariat staff upon creation of and (status) change in ticket;
- history of tickets that are created and solved
- possibility to attach supporting documents/information (photos, word document, video, logs, etc) to a ticket to enable the Contractor's staff to remedy the issue as quickly as possible.
- Contractor's ticketing system will co-exist with the Manufacturer's support channel and ticketing system: reference number of the Manufacturer's support ticket number should be put in the Contractor's ticket system.

This contractor's web-based ticketing system will be available to the Secretariat max. 3 months after the signature of the framework contract.

A transfer of an existing Secretariat's support account, including its ticket history (whether Contractor or Manufacturer) to another Secretariat's support account must be possible.

The Contractor will have the adequately trained technical staff to provide the support and maintenance services.

Max. 2 months after signature of the contract, the Contractor will provide the training certificates of the products for which certification is requested. Minimum 2 technical staff will be able to show training certificates and a yearly certification renewal course will be followed by these staff members (See Section VI.C.1.1.3 and VI.C.2).

C.1.1. Support and training.

'Support' is understood as any necessary intervention to solve an imminent, immediate or urgent problem related to hardware or software, that prevents the audiovisual Service of the Secretariat of functioning under normal working conditions and causes problems to the infrastructure or workflow.

Described below are the general support service conditions to be provided by the Contractor and some specific SLA support contract conditions for certain products (hardware or software).

Within maximum two (2) months from the FWC's signature, copies of all SLA or support contracts (as described per product in the relevant sections below) with the different Manufacturers must be made available to the Secretariat by the Contractor, in an accessible document repository.

The Secretariat will be clearly mentioned as end-client in any SLA or support contract between the Contractor and the Manufacturer. A separate support login and credentials will be created for the Secretariat.

It will be possible for the Secretariat audiovisual service's staff to create and reply to support tickets directly with the Manufacturer and in case of urgencies to directly contact the Manufacturer's support, according to the specifications of the SLA support contract. Where applicable, a hot-line telephone number with the Manufacturer's support service will be provided by the Contractor to the Secretariat.

Every ticket created with the manufacturer will be duplicated in the Contractor's ticketing system by the Contractor. All parties will be in copy of all email communication.

A list of Secretariat audiovisual staff needing access to the Manufacturer's support channel will be given to the Contractor and Manufacturer.

The Secretariat and the Contractor agree on the following incident priority levels:

- 1. Critical/Emergency
 - o Major functional failure for which there is no workaround at the time the call is logged.
 - o Causes the hardware and/or software product or operating system to fail completely.
 - o Requires constant restart of the hardware and/or software product or operating system.
 - o Prevents the hardware and/or software product installation.
 - o Irretrievable data loss/corruption or severe memory leak.
- 2. High/Urgent
 - o Major functionality of the hardware and/or software product is missing or not usable.
 - o Obscure, difficult to reproduce, infrequent crashes or hangs.
 - o Hardware and/or software cannot be used as designed, advertised or documented.
 - o Defect has caused a severe error, installation failure or data corruption.
- 3. Normal
 - o It does not meet the criteria of priority 1 or priority 2.
 - o Incorrect functionality or cosmetic issue that do not impact core functionality of the hardware and/or software product.
 - o Problem does not cause the hardware and/or software product to abort or amend.
 - o Defect found in a minor hardware and/or software function.

C.1.1.1. *General basic support package.*

General basic support will be provided during office hours from 09h00 till 19h00 and will be given via email/ticketing system, telephone, remote access or on-site intervention. For high-level events, the Contractor will foresee a Stand-by service.

1) Problem solving to correct a technical issue with hardware or software:

This problem solving will be done via email/ticketing system, telephone, remote access and on-site, between 09h00 and 19h00.

The support will follow the following escalation:

a. Email/ticket creation by the Secretariat - telephone:

The Secretariat will contact the Contractor through an email sent to the helpline email support address, generating an automatically created ticket with the status 'normal', or via the ticketing web interface by creating a ticket with the status 'normal', as soon as it has taken knowledge of an imminent risk or problem. The Contractor will reply via the ticketing system, automatically sending out an email notification of the ticket change, with a solution proposal that could be configuration adaptations, connectivity configuration adaptations, software updates, ... or a proposition of replacement of material. The Contractor will formulate a reply email within the next 2 working days (response time = 2 working days).

For emergencies and urgent problems (status 'critical' and 'high'), the Secretariat's staff will contact the Contractor by telephone, upon which the Contractor will log the issue by creating the corresponding ticket in the ticketing system. The necessary technical personnel will be made available to help solve the problem via telephone.

b. Remote access

In case it was not possible to solve the emergency or urgent problem via telephone support, the Contractor's technicians must login remotely to the infrastructure to be able to clearly identify or solve the problem. A temporary solution in the form of a workaround might need to be implemented.

c. On-site support

On-site support will be requested if it hasn't been possible to solve the emergency or urgent problem via telephone or remote access. This on-site support will be provided to the Secretariat, after coordination and verification of the availability/planning of the VPPP technical team. A temporary solution in the form of a workaround might need to be implemented.

Emergencies and urgent problems must be identified and solved as soon as possible and in any case within 3 working days (resolve time = 3 working days). If after the initial issue assessment it is judged impossible to solve the problem within 3 working days, a suitable workaround of the problem will be defined in collaboration with the technical team of the VPPP.

2) "Stand-by" during high-level events at the Secretariat:

During high-level events at the Secretariat, 1 person from the Contractor must be on a 24/7 stand-by for interventions (no obligation to be permanently on-site at the Secretariat), during the entire duration of the high-level event. The end of the high level event (equivalent to the end of the stand by period) will be notified by the Secretariat's staff to the designated stand-by person, by instant message or email.

This stand-by person will have adequate knowledge of the VPPP infrastructure and have polyvalent skills and knowledge.

Interventions will follow the normal escalation system: telephone, remote access and on-site support.

Problems must be identified and solved within 1 hour. If it is impossible to solve the problem within 1 hour, a suitable workaround of the problem will be defined in collaboration with the technical team of the VPPP.

The following is considered as high-level events:

- European Council meetings (a.k.a. European summits)
- Multilateral Summits e.g. EU – Africa summit
- Bilateral summits with strategic partners e.g. EU–Canada; EU-USA;

For information: the Audiovisual Service of the Secretariat estimates the number of days for high-level events to approximately 16 days per year.

As for these high-level events security screenings and accreditations are necessary, the Contractor will communicate the name of the Stand-by person to the Audiovisual Service of the Secretariat minimum 4 weeks in advance, allowing for the Secretariat to do the necessary to provide the needed accreditation, enabling access for on-site interventions.

The Secretariat will inform the Contractor as soon as possible but not later than 3 days in advance (for unplanned high-level events the minimum preparation time is 3 days) of the high-level event. For those unplanned high-level events, the Contractor will provide a Stand-by person who has already passed security screening.

The cost for this general basic support will be charged as a yearly fee. The general basic support service also covers 'legacy infrastructure' = the currently existing infrastructure. A description of the existing infrastructure is to be found in Section I of the technical specifications, and Appendix 3 "Schematic block diagram VPPP 2023" for a representation of the existing VPPP workflow and infrastructure. The currently existing infrastructure is valued at **656.234** euro (acquisition value).

The Tenderer will calculate and indicate the general basic support fee in the "Financial Tendering form (Products Price list)" (Annex V) based on the value of the existing VPPP infrastructure.

The general basic support fee will be annually revised based on the updated value of the VPPP infrastructure, ensuring support coverage of the complete infrastructure. The calculation method is described in detail in section VII A.3 b) below.

If general basic support for a period shorter than 1 year is required, the cost will be calculated by the Secretariat pro-rata of the yearly general basic support fee.

Article references for the general basic support package in the "Financial Tendering form (Products Price list)" (Annex V): **C-1_001**.

C.1.1.2. General extended support.

The following is understood as additional, extended support:

Problem solving to correct an immediate and urgent technical issue with hardware or software outside office hours (before 09h00 and after 19h00) and during weekends.

Extended support is priced per remote or on-site intervention.

Article references for the extended support in the "Financial Tendering form (Products Price list)" (Annex V): **C-1_002**.

C.1.1.3. *IHSE KVM infrastructure Specific SLA conditions.*

In addition to the general support conditions described in Section VI.C.1.1.1 and VI.C.1.1.2 that the Contractor will deliver, the Secretariat wants specific SLA support conditions for the IHSE KVM Infrastructure.

The SLA for support for IHSE KVM infrastructure will cover the following:

- Access to Software updates and upgrades (any new version of the product)
- 24/7 extended telephone support with the following conditions:
 - o Capture of error reports
 - o Assistance due to operating errors
 - o Fault diagnosis and elimination with the help of the partner / customer
 - o Activation and execution of tests
 - o Escalation of failures to upstream locations (development)
 - o 24/7 including bank holidays
 - o Response times: 1 hour Monday - Friday from 8h30 till 18h00; 3 hours response time outside these time slots.
- yearly review of KVM setup by Manufacturer: 1 day

Within maximum two (2) months from the signature of the FWC, the Contractor must provide the Secretariat with a copy of the SLA support contract, according to these specific support conditions, between Manufacturer and Contractor, clearly mentioning the Secretariat as end-client.

The Contractor will have at its disposition minimum 2 staff (internal or external) with Expert User level (Level B) training certification.

Costs linked to the above SLA conditions will be calculated and taken into account in the price for the 'IHSE KVM infrastructure Annual support service contract' (see ref A-2_045).

The currently existing IHSE KVM infrastructure is valued at **238.123** euro (acquisition value). The IHSE KVM infrastructure support fee will be annually revised based on the updated value of the IHSE KVM infrastructure requiring support coverage. The calculation method is described in detail in section VII A.3 b) below.

C.1.1.4. *FileCatalyst Specific SLA conditions.*

In addition to the general support conditions described in Section VI.C.1.1.1 and VI.C.1.1.2 that the Contractor will deliver, the Secretariat wants specific SLA support conditions for the FileCatalyst accelerated file transfer solution.

The SLA for support for 'FileCatalyst accelerated file transfer software' will cover the following:

- Standard support contract with the following conditions:
 - o Proactive service bulletins and notifications for new releases
 - o Customer Web portal access
 - o Knowledge database access: access to online resources such as product documentation, video tutorials and knowledge base.
 - o access to download web portal for download of software packages
 - o Assistance via email, chat and phone on business days from 07h00 till 19h00
 - o Remote Assistance
 - o Access to full software upgrades and patches (any new version of the product)
- yearly review of configuration by Manufacturer via remote connection: max. 1 day

Within maximum two (2) months from the signature of the FWC, the Contractor must provide the Secretariat with a copy of the SLA support contract, according to these specific support

conditions, between Manufacturer and Contractor, clearly mentioning the Secretariat as end-client.

Costs linked to the above SLA conditions will be calculated and taken into account in the price for the FileCatalyst license acquisition (see ref B-2_001 and B-2_002) and the FileCatalyst annual license renewal fee (see ref B-2_101 till B-2_103).

C.1.1.5. *Worldcast Kybio Video Network and System Monitoring Specific SLA conditions.*

In addition to the general support conditions described in Section VI.C.1.1.1 and VI.C.1.1.2 that the Contractor will deliver, the Secretariat will require specific SLA support conditions for Worldcast Kybio Video Network and System Monitoring solution, as follows:.

24/7 Premium support contract with the following conditions:

- Proactive service bulletins and notifications for new software releases
- Customer Web portal (CRM) access
- Knowledge database access: access to online resources such as product documentation, wiki or knowledge base.
- Complimentary driver creation during the initial deployment
- Complimentary driver creation throughout the product lifecycle: creation of new drivers to enable the integration of new equipment to the solution
- Assigned Technical Account Manager
- Remote Assistance during business hours
- Priority access to Phone & Email support during business hours/days (hotline)
- Phone & Email support 24x7
- Access to Software updates (any new version of the product)
- provide assistance for upgrades
- Complimentary software update service (once a year)

Standard support contract with the following conditions:

- Proactive service bulletins and notifications for new software releases
- Customer Web portal (CRM) access
- Knowledge database access: access to online resources such as product documentation, wiki or knowledge base.
- Complimentary driver creation during the initial deployment
- Phone & Email support during business hours
- Remote Assistance during business hours
- Access to Software updates (any new version of the product)
- Provide assistance for upgrades

The support contract ordered will depend on the implementation phase of the installation, and may change in the course of the contract.

Within maximum two (2) months from the signature of the FWC, the Contractor must provide the Secretariat with a copy of the SLA support contract, according to these specific support conditions, between Manufacturer and Contractor, clearly mentioning the Secretariat as end-client.

Costs linked to the above SLA conditions will be calculated and taken into account in the price for the 'Worldcast Kybio Video Network and System Monitoring' annual support renewal fee (see ref B-6_001 & B-6_002).

C.1.1.6. *Training for Secretariat's staff.*

Basic training to be able to use the product (hardware or software) must be provided without any extra cost, upon finishing of the installation and integration of the product into the infrastructure and workflow of the Audiovisual Service of the Secretariat. This basic training will not exceed 1 working day per product (1 day = 8 hours).

Any additional training given by the Contractor, upon clear request of the Audiovisual Service of the Secretariat, will be charged extra per working day (1 day = 8 hours).

Article references for the training in the "Financial Tendering form (Products Price list)" (Annex V): **C-1_003**.

C.1.2. Maintenance and repairs.

'Maintenance' is understood as any pro-active, preventive actions to maintain the platform in good condition. These maintenance slots are known and planned in advance. Maintenance includes system health checks, upgrades and updates of firmware and software, system clean-ups, etc.

It could be that there is a certain downtime of servers, machines or the system, due to updates, upgrades or modifications to the system or server.

The planning of these maintenance slots will always be discussed with the technical team of the VPPP.

The Contractor will supply a maintenance report to the Secretariat after each maintenance intervention.

C.1.2.1. *Basic Maintenance package.*

The basic maintenance package will cover in total maximum 8 working days per year (1 day = 8 hours).

Twice a year, a maintenance slot of minimum 3 days each will be scheduled. This will typically be done during calm periods of the year: beginning of January or Easter holidays and during August.

The Secretariat will decide if they use the remaining 2 days as another maintenance slot or if they add this to the twice-a-year maintenance slots of January or Easter holidays and August.

The cost for this basic maintenance package will be charged as a yearly fixed fee.

This basic maintenance package cost will include transport and any other logistical or administrative cost the Contractor might have to provide the necessary service.

If basic maintenance for a period shorter than 1 year is required, the cost will be calculated by the Secretariat pro-rata of the yearly basic maintenance package fee.

Article references for the basic maintenance package in the "Financial Tendering form (Products Price list)" (Annex V): **C-1_004**.

C.1.2.2. *Additional Maintenance.*

For any additional maintenance days, exceeding the 8 working days from the basic package, the Tenderer will quote a price per day (1 day = 8 hours).

The Secretariat will formulate a clear request for additional maintenance days.

Article references for the additional maintenance in the "Financial Tendering form (Products Price list)" (Annex V): **C-1_005**.

C.1.2.3. *Repairs and replacement.*

Upon identification of an item/product (hardware), not covered by a Hardware maintenance package or specific SLA support contract, that is broken and needs repairs, the Contractor will provide a price offer for the repair of that product within 4 weeks. Upon reception of that price offer, the Secretariat will decide whether to repair the item or replace it by a new.

Whether it is decided to repair the item or to have it replaced by a new one, during the time of reparation or delivery of the new item, the Contractor will provide the Secretariat with a replacement of that product, so the Secretariat can continue working under normal conditions, with no changes in workflow or infrastructure.

The broken equipment will be returned to the Secretariat, in case the Secretariat decides to replace the broken equipment by a new item.

The Contractor will not charge an additional cost for providing the Secretariat with a replacement product during the time of reparation or during the delivery time of the new item.

C.1.3. Consultancy and development in the audio-visual domain.

For any need for consultancy or development for the VPPP, the Secretariat will address a request to the Contractor, describing the scope of work and/or expected deliverables. These consultancy and/or development services will only be performed on working days.

For the purpose of these services, the Contractor should be able to provide the following profiles:

C.1.3.1. *Network consultant for audiovisual broadcast environments.*

The network consultant will have network experience within media environments. He/she has minimum 3 years experience with the design, implementation and management of performant, high bandwidth switched networks for audiovisual purposes. He/she will have knowledge of DNS, signal routing and optimization within media networks, router configuration, (network) switch configuration, multicast streaming, etc, He/she'll be able to consult and advise the Secretariat's audiovisual department about future-proof network solutions and network management/monitoring. In case of persistent network problems, the network consultant would be required for troubleshooting in close collaboration with the internal IT network team.

The Tenderer will put a price for the Network consultant for audiovisual broadcast environments per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the network consultant for audiovisual broadcast environments in the "Financial Tendering form (Products Price list)" (Annex V): **C-1_006-01** and **C-1_006-02**.

C.1.3.2. *Software engineer/developer – API integrator and programmer.*

The software engineer/developer will be required for providing VPPP application integration and automation through API modification and development, in case an 'out-of-the-box' integration or workflow is not possible.

He/she will have minimum 3 years experience in API development and programming.

This will be done in close collaboration with third parties and/or the internal IT teams when necessary.

The Tenderer will put a price for the Software engineer/developer – API integrator and programmer per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the Software engineer/developer in the “Financial Tendering form (Products Price list)” (Annex V): **C-1_007-01** and **C-1_007-02**.

C.1.3.3. *Video network and system monitoring engineer/consultant.*

The video network and system monitoring engineer/consultant will have minimum 3 years' experience with deploying system monitoring software.

He/she'll advise the Secretariat's audiovisual department on best practices and workflow guidelines to deploy, configure, operate and administrate system monitoring solutions.

The Tenderer will put a price for the Video network and system monitoring engineer/consultant per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the Video network and system monitoring engineer/consultant in the “Financial Tendering form (Products Price list)” (Annex V): **C-1_008-01** and **C-1_008-02**.

C.1.3.4. *Audiovisual solutions consultant/specialist.*

The audiovisual solutions consultant/specialist might be requested to advise on projects that include collaboration with other departments of the Secretariat, such as the internal IT department and other departments when necessary.

He/she will have minimum 3 years experience and a broad knowledge of (broadcast) networks and protocols, broadcast environments and operations, broadcast systems and software architecture and relational databases.

The Tenderer will put a price for the Audiovisual solutions consultant/specialist per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the Audiovisual solutions consultant/specialist in the “Financial Tendering form (Products Price list)” (Annex V): **C-1_009-01** and **C-1_009-02**.

C.2. Cinegy services.

In addition to the General Services described in VI.C.1 'General Services', the Secretariat requires specific services related to Cinegy products.

The Contractor will have the adequately trained technical staff to provide the specific services related to Cinegy products.

Max. 2 months after signature of the contract, the Contractor will provide the requested 'Cinegy GOLD partner' training certificates. Minimum 2 technical staff will be able to show these Gold training certificates and a yearly certification renewal course will be followed by these staff members.

C.2.1. Cinegy Specific Service level and support conditions.

The Secretariat requires specific Service level and Support conditions for the Cinegy products and applications.

The parties and roles for Cinegy support and services for the Secretariat will be as follows:

- End-Customer: user of the Cinegy products = the Secretariat's audiovisual sector.
- Partner(s): There are 2 different roles identified as Partner-Level roles:
 - o Sales Partner: reseller of Cinegy products
 - o Service Partner: support and service contact with the end-customer.
This can either be the same as the Sales Partner or the technical staff of the Secretariat's audiovisual sector.
- Cinegy Support Provider (CSP): a Cinegy partner who has successfully completed Gold Partner Certification.
 - o The Cinegy Support Provider will have minimum 2 trained 'Cinegy GOLD Certified' staff and ensure yearly GOLD certification renewal.
 - o These Cinegy GOLD certificates will be presented to the Secretariat max. 2 months after signature of the contract.

The CSP will be either an authorised Cinegy Sales Partner fulfilling above conditions, or Cinegy directly.

The CSP will provide the necessary Cinegy Certified Support Representative (CCSR), i.e. a person who has successfully completed all relevant courses as required by Cinegy from time to time for a particular product line.

The Contractor will provide a Cinegy Service Level Framework Agreement according to the following conditions:

- The Cinegy service level required will be a **First class support level with 24/7 support** with access to all updates and upgrades.
- The Secretariat's Audiovisual sector's technical team will have Partner-level access to Cinegy's Helpdesk Portal. The Secretariat will be considered and act as a Partner (Service Partner).
- In case of critical or high-level problems experienced shortly before a high-level event, the Secretariat may request a Cinegy technical staff on 'stand-by'. The Cinegy technical staff must be reachable by email and phone during the course of the event. Remote interventions from Cinegy during stand-by service for high-level events will be possible, whenever necessary and requested by the Secretariat.

The following is considered as high-level events:

- European Council meetings (a.k.a. European summits)
- Multilateral Summits e.g. EU – Africa summit
- Bilateral summits with strategic partners e.g. EU–Canada; EU-USA;

For information: the Audiovisual Service of the Secretariat estimates the number of days for high-level events to approximately 16 days per year

- Transfer of an existing Secretariat's Cinegy support account, including its ticket history, to another Secretariat's Cinegy support account must be possible.

Support workflow and communication/information channels:

Support will be provided via the following means:

- Email support: helpdesk@cinegy.com
- Cinegy HelpDesk Portal: web based tool for issues tracking, knowledgebase, troubleshooting, etc.: <https://helpdesk.cinegy.com/index>.
The HelpDesk Portal will be the primary tool to log issues with Cinegy. The HelpDesk Portal includes live chat possibilities.
- Remote access: remote access will be granted by the Secretariat upon request from Cinegy technical support whenever needed, either via VNC secure connection (preferred option; access information will be provided by the Secretariat) or via Teamviewer.

Communication/information channels:

- Telephone: used for Customer Relationship Management and communication with Cinegy Sales Representative.
- Partner support Cinegy Knowledge Base: partner.cinegy.com.
The Secretariat's audiovisual sector technical team will receive Partner Access to the Portal. If required, the Secretariat might also be granted access to the beta program level. Partner Portal provides access to the latest released versions, developer information, utilities and add-ons like Diagnostic Tools, third party drivers and tools.
- Customer support Cinegy Knowledge Base: my.cinegy.com.
The Secretariat will receive User Access to the Portal, upon registration to my.cinegy.com. Customer Portal provides access to the latest released versions, utilities and add-ons like Diagnostic Tools, third party drivers and tools.
- Cinegy Open:
open.cinegy.com provides unfettered access to Cinegy's user documentation and published APIs.

For Cinegy support, the incident priority levels are defined as follows::

- 1. Critical/Emergency:
 - o Major functional failure for which there is no workaround at the time the call is logged.
 - o Causes the software or operating system to fail completely.
 - o Requires constant restart of the software or operating system.
 - o Prevents the software installation.
 - o Irrecoverable data loss/corruption or severe memory leak.
- 2. High/Urgent
 - o Explicitly documented major functionality of the software is missing or not usable.
 - o Obscure, difficult to reproduce, infrequent crashes or hangs.
 - o Software cannot be used as designed, advertised or documented.
 - o Documentation defect has caused a severe error, installation failure or data corruption.
- 3. Medium/Normal
 - o It does not meet the criteria of priority 1 or priority 2.
 - o Incorrect functionality, cosmetic issue or documentation issues that do not impact core functionality of the product.
 - o Problem does not cause the product to abort or amend.
 - o Defect found in a minor function.
 - o Misspellings in documentation or in product screens
- 4. Feature request
 - o Additional functionality to be added.
 - o Changing the behavior of the system.

Response time for First Class 24/7 support and updates/upgrades:

<i>Severity</i>	<i>Response</i>	<i>Feedback Interval</i>
Critical/Emergency	4 hours	8 hours
High/Urgent	8 hours	24 hours
Medium/Normal	24 hours	48 hours

Support procedure and issue/ticket escalation model:

Level 1 - The CSP (either authorised Cinegy Sales Partner or Cinegy directly)

This is the initial support level responsible for basic customer issues that generally receive customers calls first.

- Level 1 specialist responsibilities:
 - o Gathering the customer's information;
 - o Analyzing the symptoms;
 - o Determining the customer's issue;
 - o Identifying what the customer is trying to accomplish;
 - o Sorting through the possible solutions available (if it exists in the knowledge base);

If necessary/unresolved, the issue will be escalated to Level 2.

Level 2 - Technical Support Engineer nominated by CSP

This is a more in-depth technical support level that is responsible for handling the most difficult or advanced problems.

- Level 2 specialist responsibilities:
 - o Assisting the Level 1 personnel to solve basic technical problems;
 - o Investigating elevated issues by confirming the validity of the problem;
 - o Seeking for known solutions related to these more complex issue;
 - o Determining whether or not to solve the problem with assistance of the development team;
 - o Sending the extreme problems to the original developers for in-depth analysis;
 - o (Re)creating the bug;
 - o Providing Dongle Update requests to Cinegy
 - o Providing Cinegy Software and fixes to the Customer

If necessary/unresolved, the issue will be escalated to Level 3 support.

Level 3 – Escalation to Cinegy Support Experts

This is the highest level of support responsible for handling the most difficult or advanced problems.

- Level 3 specialist responsibilities:
 - o Assisting both Level 1 and Level 2 personnel;
 - o Research and development of solutions to new or unknown issues;
 - o Reviewing the work order and assessing the time already spent with the customer;
 - o Prioritizing the problem;
 - o Determining whether or not to solve the problem;
 - o Sending the extreme problems to the original developers for in-depth analysis;
 - o (Re)creating the bug;
 - o If it is determined that a problem can be solved, the Cinegy specialist assigns issue to the responsible developer for implementing the best solution.
 - o Once the solution is verified, it is delivered to the CSP, who will make available to the Customer, and make available for future troubleshooting and analysis.

Within maximum two (2) months from the signature of the FWC, the Contractor must provide the Secretariat with a copy of the Cinegy Service Level Framework Agreement, according to these specific service level and support conditions, between Cinegy and the Secretariat, clearly involving all parties concerned.

Costs linked to the above specific service level and support conditions will be calculated and taken into account in the price for the Cinegy license acquisition (see ref B-1_001 till ref B-1_023) and the Cinegy annual license renewal fee (see ref B-1_101 till ref B-1_123).

C.2.2. Cinegy Professional Services

The Secretariat may request the Contractor for direct Cinegy services that are not covered by the Service Level Framework Agreement nor the product SLA's, like consultancy or development linked to Cinegy products related to the VPPP and its workflow.

The following Cinegy Professional Services may be requested:

C.2.2.1. *Installation & Configuration:*

Cinegy software, and the supporting operating system and server software, can be easy to get started, but hard to get perfect. This service package allows for correct software installation tweaking, with suitable settings for the Secretariat's requirements. It delivers help with upgrades to existing systems or adding extra items to an existing solution.

The Tenderer will put a price for the Cinegy installation and configuration services per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the Cinegy installation and configuration services in the "Financial Tendering form (Products Price list)" (Annex V): **C-2_001-01** and **C-2_001-02**.

C.2.2.2. *Systems Architecture & Design:*

The Secretariat may require help/specialised consultancy when doing some significant changes to the VPPP. This service pack offers first-principles consultation to understand what the system requirements of a solution will be, and then help select appropriate hardware configurations to match that. Migrations between equipment can be mapped, and implementations in the cloud can be designed.

The Tenderer will put a price for the Cinegy systems architecture and design services per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the Cinegy systems architecture and design services in the "Financial Tendering form (Products Price list)" (Annex V): **C-2_002-01** and **C-2_002-02**.

C.2.2.3. *Systems Troubleshooting:*

Systems can grow and get complicated. Software can be configured wrong or integrate badly. Networks can suffer at scale, or changes to standards can cause hiccups. The Secretariat could require this service package when something is wrong, but nobody can pinpoint where or just help is needed understanding where to start.

The Tenderer will put a price for the Cinegy systems troubleshooting services per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the Cinegy systems troubleshooting services in the "Financial Tendering form (Products Price list)" (Annex V): **C-2_003-01** and **C-2_003-02**.

C.2.2.4. *Workflow Analysis & Design:*

It's critical that a requirement is understood and mapped to an appropriate workflow – either a human one or an automated one. This service pack will enable the Secretariat to do a review of the VPPP workflow, in order to optimize workflow efficiency, design and fine-tune existing operations.

The Tenderer will put a price for the Cinegy workflow analysis & design services per working day (1 day = 8 hours).

Article references for the Cinegy workflow analysis & design services in the “Financial Tendering form (Products Price list)” (Annex V): **C-2_004-01**.

C.2.2.5. Demonstration & Proof-of-Concept:

The Secretariat might need a demonstration of software, a software assessment or a proof-of-concept for a system or software. This service pack will enable the Secretariat to request software demonstrations, assessments or proof-of-concept systems, running for a few weeks to validate assumptions or business cases.

The Tenderer will put a price for the Cinegy demonstration & proof-of-concept services per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the Cinegy demonstration & proof-of-concept services in the “Financial Tendering form (Products Price list)” (Annex V): **C-2_005-01** and **C-2_005-02** .

C.2.2.6. Development & Feature Implementation:

In situations where the Secretariat might require a specific Cinegy feature development which will take long before inclusion in the Cinegy roadmap, or not at all, this service will allow to fund the implementation of a required feature, including Cinegy help in clearly defining the requirements and making sure the feature request is clear, logical and beneficial.

The Tenderer will put a price for the Cinegy development & feature implementation services per working day (1 day = 8 hours).

Article references for the Cinegy development & feature implementation services in the “Financial Tendering form (Products Price list)” (Annex V): **C-2_006-01**.

C.2.2.7. Project Management & Overview:

This service will allow the Secretariat to offload the tracking of many threads, for big and complex implementations or projects, onto Cinegy's professional services and deliver project management services to keep control of resources, activities and deadlines.

The Tenderer will put a price for the Cinegy project management & overview services per working day (1 day = 8 hours).

Article references for the Cinegy project management & overview services in the “Financial Tendering form (Products Price list)” (Annex V): **C-2_007-01**.

C.2.2.8. Developer Support:

The Secretariat may need specific 3rd party integration for existing systems or selected products. Through this service, the Secretariat can call upon Cinegy developers, helping to fill in areas that are unclear or demonstrate techniques to achieve operations effectively.

The Tenderer will put a price for the Cinegy developer support services per working day (1 day = 8 hours).

Article references for the Cinegy developer support services in the “Financial Tendering form (Products Price list)” (Annex V): **C-2_008-01**.

C.2.3. Cinegy training of Secretariat's Staff:

Basic training for Cinegy products, to be able to use the product, must be provided without any extra cost, upon finishing of the installation and integration of the Cinegy product into the infrastructure and workflow of the Audiovisual Service of the Secretariat.

This basic training can be given through a remote training session.

This basic training will not exceed 1 working day per product (1 day = 8 hours).

Any additional training on Cinegy products (e.g. training of new staff or 'refresh' product training due to software or workflow changes), upon clear request of the Audiovisual Service of the Secretariat, will be charged extra per working day (1 day = 8 hours).

Article references for the training in the “Financial Tendering form (Products Price list)” (Annex V): **C-2_009-01**.

C.3. Data Centric AI Platform related services.

In addition to the General Services described in VI.C.1, the Secretariat may request the Contractor for specific services related to the Data Centric AI Platform integration, developments and analyses.

C.3.1. Machine Learning (ML) Engineer:

The Machine Learning engineer will be required for providing VPPP AI models and application development.

He/she will have minimum 3 years' experience in ML development and programming.

He/she will work in close collaboration with third parties and/or the internal IT teams when necessary.

The Tenderer will put a price for the Machine Learning (ML) Engineer per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the Machine Learning (ML) Engineer in the “Financial Tendering form (Products Price list)” (Annex V): **C-3_001-01** and **C-3_001-02**.

C.3.2. Data Engineer :

The Data engineer will be required to make the appropriate data available for exploitation by AI models, to provide VPPP application integration and automation through data pipelines development and API modification or development in case an 'out-of-the-box' integration or workflow is not possible.

He/she will have minimum 3 years' experience as a Data Engineer.

He/she will work in close collaboration with third parties and/or the internal IT teams when necessary.

The Tenderer will put a price for the Data Engineer per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the Data Engineer in the “Financial Tendering form (Products Price list)” (Annex V): **C-3_002-01** and **C-3_002-02**.

C.3.3. MLOps Engineer:

The MLOps engineer will review data science models, provide automation and monitoring by deploying AI solutions and models in a production environment, and ensuring continuous feedback loop.

He/she will have minimum 3 years’ experience as a MLOps Engineer.

He/she will work in close collaboration with third parties and/or the internal IT teams when necessary.

The Tenderer will put a price for the MLOps Engineer per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the MLOps Engineer in the “Financial Tendering form (Products Price list)” (Annex V): **C-3_003-01** and **C-3_003-02**.

C.3.4. AI Data Scientist / Data Strategist (consultant/specialist):

The Data Scientist / Data Strategist (consultant/specialist) might be requested to advise on projects that include Artificial Intelligence and data science, and will help the Secretariat drive decision-making by collecting, analyzing and interpreting data.

His/her main roles include:

- collect and prepare relevant data for use in analytics applications;
- use various types of analytical tools to detect patterns, trends, and relationships in data sets;
- develop statistical and predictive models to compare against datasets;
- create data visualizations, dashboards and reports to communicate their findings.

He/she will have minimum 3 years experience in AI Data Science.

The Tenderer will put a price for the AI Data Scientist / Data Strategist (consultant/specialist) per half working day (half day = 4 hours) and per working day (1 day = 8 hours).

Article references for the AI Data Scientist / Data Strategist consultant/specialist in the “Financial Tendering form (Products Price list)” (Annex V): **C-3_004-01** and **C-3_004-02**.

D. Consumables and accessories

Any small equipment required to fully complete an installation, support or maintenance session for the VPPP infrastructure, or to improve the VPPP workflow, will be purchased based on a request for price offer.

These *consumables/accessories* include the following (non-exhaustive list):

- cables: usb cable, HDMI cable, DVI Cable, Display-Port cable, analog audio cable etc.
- connectors (cable termination): BNC, XLR, MUSA, etc.
- rack and installation accessories: mounting brackets, shelves, plates, cable guides, screws, ears, rails, cage nuts, closing plates, nylon ties, cable cover, patch panels, etc.
- any small accessories: splitters, controllers, converters, etc

Following the request of the Secretariat, the contractor must submit a price offer for the accessories and/or consumables no later than 7 days prior to start of the works.

Costs related to consumables/accessories for the VPPP infrastructure are limited to maximum 5% of the total value of the framework contract.

VII. FINANCIAL TENDERING FORM (PRODUCTS PRICE LIST)

➤ Products (hardware and software):

The Tenderer must confirm that all products proposed in the tender are fully compliant with the mandatory minimum technical requirements set out in these specifications and must upon request by the Secretariat provide supporting documents demonstrating compliance.

The unit prices must include delivery, preparation, installation, integration into the existing infrastructure and into the existing workflow, configuration and putting into production of hardware and software items.

The Tenderer will include the most recent Recommended Retail Price list (RRP) for all the proposed brands as annex to his technical offer.

Hardware:

- Guarantees: hardware must be covered by a 2-year guarantee.
- **Pricing (Prices in the Financial Tendering form):** The tenderer must indicate his unit price for hardware items in column "Unit Price" (column J) of the Financial Tendering form. Along with the tenderer's unit price, the tenderer will provide per proposed hardware product the most recent Recommended Retail Price (RRP) (column "Manufacturer Recommended Retail Unit Price" in the Financial Tendering form). A percentage of reduction² will be automatically calculated, with the tenderer's unit price compared to the RRP for each proposed hardware product.
This percentage will be used for any price update during the entire duration of the FWC, by using the latest RRP list available at the moment of the price update.

Software:

- A software license acquisition price must include support and software updates and upgrades, or a specific SLA with special (support) conditions, valid for the duration of 1 year unless otherwise specified in the individual product or support descriptions/conditions.
- **Pricing (Prices in the Financial Tendering form):** The tenderer must indicate his unit price for software items (acquisition and annual renewal/subscription) in column "Unit Price" (column J) of the Financial Tendering form. Along with the tenderer's unit price, the tenderer will provide per proposed software product the most recent Recommended Retail Price (RRP) (column "Manufacturer Recommended Retail Unit Price" in the Financial Tendering form). A percentage of reduction³ will be automatically calculated, with the tenderer's unit price compared to the RRP for each proposed software product.

² The automatically calculated percentage can also be a negative reduction in case the tenderer's unit price is higher than the RRP. This could be due to the inclusion of costs linked to delivery, preparation, installation, integration, configuration and putting into production. In the case of a negative reduction, the tenderer must provide clarifications in the column 'Clarifications' of the Financial Tendering form (Product Price list).

³ The automatically calculated percentage can also be a negative reduction in case the tenderer's unit price is higher than the RRP. This could be due to the inclusion of costs linked to delivery, preparation, installation,

This percentage will be used for any price update during the entire duration of the FWC, by using the latest RRP list available at the moment of the price update.

➤ **Services:**

Service prices shall be defined at a fixed price or by Person-(half)day, as indicated in the Service specifications (Section VI.C), and shall include all general expenses and expenses directly connected with the provision of the Services such as company management costs, social security costs, travel and office expenses.

VII.A. Products Price list revision

Either the Contractor or the Secretariat may request a modification of the Products Price list, which in any case, always needs to be approved in written by both parties.

The Products Price list may be modified due to:

- Technological (hardware and software) developments which may lead to a replacement of an existing product, a modification of an existing product (e.g. modified hardware requirements due to new software versions) or an addition of a new model/version of an existing product in the Products Price list - see VII.A.1. below.
- Technological developments which may lead to the introduction of a new product in the Products Price list - see VII.A.2. below.
- Yearly price revision - see VII.A.3. below.

VII.A.1. Technological development - new versions/models of existing products (hardware and software)

In case a new model/version of a product in the Products Price list is introduced on the market and that this new model/version is offering the same or better functional and technical performance, compliant with the Secretariat's requirements and needs, the Contractor must propose to replace or add this new product to the Price list. The proposed replacement or addition must be fully compliant with the functional and technical specifications as detailed in Section VI of this document, and must be agreed upon with the Secretariat.

In this context, to facilitate the management of the VPPP for the Secretariat, the Products Price List will be revisable multiple times a year, on either the initiative of the Contractor or on the request of the Secretariat, on an ad-hoc basis possible per product, whenever a specific need is identified by the Secretariat or whenever Manufacturers or Software Vendors change their system requirements and/or product catalogues.

For any replacement of a product (new version/model), the price proposed by the Contractor for approval by the Secretariat, must include the **same percentage** from the Recommended Retail price (RRP), as provided in its initial offer (Financial Tendering form) for this specific product.

In practice, following the Contractor's price proposal, the Secretariat will update the Products Price list accordingly. This updated Products Price list will then be attached to the related purchase order issued by the Secretariat. By signing the purchase order, both parties agree upon the updated Products Price list. The PO signature is considered written approval of the modified Products Price list.

integration, configuration, putting into production and/or the first year support inclusion for software license acquisitions. In the case of a negative reduction, the tenderer must provide clarifications in the column 'Clarifications' of the Financial Tendering form (Product Price list).

Should a product referred to in the Products Price list no longer be available at the moment of an order, the Contractor undertakes to replace it with new equipment at no extra cost, subject to the prior written approval of the Secretariat. Such proposed replacement product must be equivalent or better in terms of performance and fully compliant with the functional and technical specifications as detailed in Section VI of this document.

VII.A.2. **Technological development - introduction of new products on the price list**

To cover existing needs in a new manner, typically due to technological developments, the Secretariat or the Contractor may request/propose to include new products providing new features or functions not previously known nor available amongst the products listed in the Products Price list.

If a new product is ordered by the Secretariat, any incompatibility with previous products that becomes apparent in the course of its use, shall be resolved by the Contractor as swiftly as possible and at no cost to the Secretariat.

Whenever a new product is added to the Product Price list, the Contractor's price **cannot exceed the most recent RRP**. A new percentage of reduction from the RRP for this specific new product will be proposed by the Contractor in his offer. After the acceptance by the Secretariat, this **new percentage of reduction** from the RRP, will be introduced in the Products Price list and will be automatically applied for any future purchases by the Secretariat for this specific new product.

In any case, new products not originally foreseen in the Products Price list, must be part of the principal product classifications and specifications covered by this FWC, and the total value of new products ordered must not exceed 10 % of the overall value of the framework contract.

VII.A.3. **Yearly Price revision**

There are three categories of price revision, as follows:

a) Yearly indexation

The yearly indexation only concerns the service items as described in these tendering specifications in the following sections: **C.1.1.2** (Extended support) **C.1.1.6** (Training services), **C.1.2.1 and C.1.2.2** (Basic and additional Maintenance), profiles indicated from **C.1.3.1 to C.1.3.4**, profiles indicated from **C.3.1 to C.3.4**.

Prices shall be fixed and not subject to revision during the first year of the Contract.

At the beginning of the second and every following year of the FWC, each price may be revised upwards or downwards at the written request of one of the parties, no later than three months before the anniversary date of entry into force of the FWC. The other party must acknowledge the request within 14 days of receipt.

The calculation method of the yearly price indexation is described in the article I.5.2 a) of the FWC.

b) Support services

The yearly price revision for the support services only concern the items as described in these tendering specifications in the following sections: **C.1.1.1** General basic support package and

C.1.1.3 IHSE KVM infrastructure. See ref C-1_001 and ref A-2_045 in the Financial Tendering form (Products Price list).

The first year, the annual fee corresponds to the price indicated in the Financial Tendering form (Contractor's initial offer) and it is based on the value of the VPPP infrastructure of the Secretariat in 2023, for the following items:

- General basic support package – covers the VPPP infrastructure (except the IHSE KVM infrastructure) with a value in 2023 of **656.234 euro**.
- IHSE KVM infrastructure (SLA) - covering the IHSE KVM infrastructure with a value in 2023 of **238.123 euro**.

The Tenderer's annual fee for the first year will determine a percentage (%) of the value of the infrastructure, calculated automatically for each of the above support packages.

As from the 2nd year, both annual support fees may be reviewed and updated, upon either the Contractor's initiative or the request of the Secretariat. The same percentage calculated for the 1st year annual fee, as indicated in the Financial Tendering form, will apply to the updated value, of, respectively, VPPP general infrastructure (except IHSE KVM infrastructure) and the IHSE KVM infrastructure. The updated value will be calculated as follows: the initial value as indicated in the financial form, adding newly installed equipment and excluding decommissioned equipment.

The updated calculation of both annual support fees, as described above, will be done no later than 30 days before the yearly anniversary of the entry into force of each support package.

c) Products Price list yearly revision

The yearly product price revision may apply to all products (hardware and software) and services of the Products Price list, **with the exception of the following items:**

- i. Items described above in point VII.A.3 a) and b),
- ii. Products/Items where previous specifications/configurations were changed within the past year (see VII.A.1)
- iii. Items for which the price is fixed for the entire duration of the framework contract:
 - B.1.2. Cinegy annual license renewal fee.
 - B.2.2. FileCatalyst annual license renewal fee.
 - B.6. Video network and system monitoring solution (KYBIO) Annual renewal fee (Premium or Standard).
 - B.7.2. Cantemo annual renewal fee
 - B.8.2. Pulse-IT (Embrace) annual license subscription fee
 - B.9.2. AnyDesk On Premise annual license renewal fee
 - B.10.2. Quality Checker annual renewal fee

The prices of the Products Price List can, upon either the Contractor's initiative or the request of the Secretariat, be revised in common agreement yearly but no later than 30 days of the yearly anniversary of the entry into force of the framework contract.

The revised price per product must be calculated based on the most recent RRP available at the revision date. For each product, the same percentage as provided in the initial offer will be applied.

Once the price-update of the Products Price list is made available to the Secretariat, the Secretariat must acknowledge reception within 15 working days.

VIII. UNDERTAKINGS/RESPONSIBILITIES/INFORMATION TO BE PROVIDED BY THE CONTRACTING AUTHORITY

The Secretariat will enable and provide remote access to the VPPP infrastructure to the Contractor for maintenance and support purposes, according to the conditions and procedure described in Annex VII 'Remote Access Convention' of the draft Framework contract

IX. ORDERING AND INVOICING ARRANGEMENTS

See draft framework contract terms and conditions.

X. ESTIMATED VOLUMES

For indicative purposes only and without any commitment by the contracting authority, the estimated volumes of supplies/services that will be requested are indicated in the financial form (Annex V of the tendering specifications).

XI. VARIANTS

Variants shall not be permitted.

Variants proposed by tenderers shall not be considered.

ADMINISTRATIVE PART

I. PARTICIPATION IN THE TENDER PROCEDURE

Participation in this tender procedure is open on equal terms to all natural and legal persons coming within the scope of the Treaties and to all natural and legal persons in a third country that has a special agreement with the European Union in the field of public procurement, under the conditions laid down in that agreement. Where the Multilateral Agreement on Government Procurement concluded within the World Trade Organization applies, participation in this call for tenders is also open to nationals of the countries that have ratified that Agreement, under the conditions it lays down.

Annex VII 'Remote Access Convention' of the draft Framework contract

By participating to this tendering procedure, the Tenderers confirm their acceptance of the 'Remote Access Convention' conditions and procedure. The 'Remote Access Convention' will be completed and signed by the Contractor upon award of the framework contract.

II. EVIDENCE OF ACCESS TO PROCUREMENT

1. Legal entity form and evidence

- a) All tenderers and identified subcontractors must provide a signed legal entity form with supporting evidence, in order to prove their legal capacity and their status. The form is available from:

<http://www.consilium.europa.eu/en/general-secretariat/public-procurement/>

- b) Tenderers must provide the following information with the legal entity form:
- official supporting documents (register(s) of companies, official gazette, VAT registration, etc.)
 - for legal persons, a legible copy of the notice of appointment of the persons authorised to represent the tenderer in dealings with third parties and in legal proceedings, or a copy of the publication of that appointment if the legislation which applies to the legal entity concerned requires such publication. Evidence must be provided of any delegation of this authorisation to another representative not indicated in the official appointment;
 - for natural persons, proof of their status as a self-employed person (supporting documents concerning their social security cover and value added tax (VAT) status) and, where applicable, proof of registration on a professional or trade register or any other official document showing the registration number.

2. Joint offers/groupings/consortia

- a) Groupings/consortia of two or more economic operators may submit a joint offer. Joint offers may include subcontractors, in addition to the joint tenderers.
- b) The grouping/consortium must state the name of the lead company and the single point of contact during the procurement procedure.
- c) Each member of the grouping/consortium must provide:
- the legal entity form and supporting evidence (see point II.1 above) and
 - the declaration concerning the exclusion criteria and the selection criteria (see point

ADMINISTRATIVE PART

IV.1.(c) and Annex I). The exclusion criteria will be applied to each member of the grouping/consortium individually. The selection criteria will be applied to the grouping/consortium as a whole. (see IV.3.a) below and Annex I).

- d) In addition, each member of the grouping/consortium must provide a document:
- authorising the lead company to tender and to sign a contract on behalf of the grouping/consortium and to issue invoices on behalf of all members;
 - detailing the role each member of the grouping/consortium will play in performing the contract and stating the specific resources to be made available for the performance of the contract by each member;
 - stating explicitly that the members of the grouping/consortium are jointly and severally liable to the contracting authority and that they undertake jointly to perform the contract if it is awarded to them.
- e) Any change in the composition of the group/consortium during the procurement procedure may lead to rejection of the corresponding tender. Any change in the composition of the group/consortium after the signature of the contract may lead to the termination of the contract.

3. Subcontracting

- a) Any intention to subcontract part of the contract must be clearly stated in the tender. Tenderers should provide:
- a document stating clearly the identity, roles, activities and responsibilities of the subcontractor(s) and specifying the intended volume/proportion of the work for each subcontractor;
 - a letter of intent by each subcontractor stating unambiguously that it undertakes to collaborate with the tenderer should the contract be awarded to the latter, and indicating the extent of the resources that it will put at the tenderer's disposal for the performance of the contract.

Subcontractors must provide the legal entity form and supporting evidence (see point II.1 above) and the declaration concerning the exclusion/selection criteria (see point IV.2.(b) and point IV.3.(a)(ii).

The exclusion criteria will be applied to subcontractors individually.

The selection criteria will be applied to the tenderer/subcontractor(s) as a whole. (see point IV.3.a)

- b) If the above-mentioned documents are not provided, the contracting authority will assume that the tenderer does not intend to subcontract any tasks.

III. PROTOCOL ON THE PRIVILEGES AND IMMUNITIES OF THE EUROPEAN UNION

The Protocol on the Privileges and Immunities of the European Union applies to this procurement procedure. The contracting authority is exempt from customs duties, indirect taxes and sales taxes, including value added tax (VAT), under Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Communities and the relevant Member State legislation.

IV. EVALUATION

1. Evaluation steps

- a) The evaluation of offers will be based on the information provided by the tenderers. In addition, the contracting authority reserves the right to use any other information from public or specialist sources for verifying the exclusion and selection criteria. All information will be assessed in the light of the criteria set out in these tender specifications.
- b) The contracting authority will check that the legal identity form(s) have been correctly filled in and that the supporting evidence is complete. If applicable, the documentation relating to joint offers/subcontractors will also be checked.
- c) The evaluation procedure will consist of the following steps, which will be carried out in no particular order:
 - **exclusion criteria:** verification of the signed declaration stating that tenderers are not in one of the situations that would exclude them from participating in the procurement procedure (see point IV.2. below);
 - **selection criteria:** verification of the signed declaration stating that tenderers meet the mandatory selection criteria relating to the financial and technical capacity of tenderers (see point IV.3. below and Annex I);
 - **award criteria:**
 - = verification that the tenders comply with the minimum requirements set out in the technical specifications (see Annex III 'Demonstration of conformity with the tender specifications - minimum requirements' and Annex V 'Financial Tendering Form (Products Price list)')
 - = evaluation of tenders on the basis of the award criteria (see point V. – Award Criteria below).

2. Exclusion criteria

- a) All tenderers must provide a declaration on their honour (see Annex I), duly signed and dated by an authorised representative of the tenderer, stating that they are not in one of the situations of exclusion listed in Annex I.
- b) The declaration on honour must also be provided by all members of a grouping/consortium and all subcontractors.
- c) The successful tenderer must provide the documents mentioned as supporting evidence¹ in Annex I before the contract is signed and within a deadline set by the contracting authority. This requirement applies to all members of a grouping/consortium in the case of a joint tender and to identified subcontractors whose capacities will be relied upon to fulfil the selection criteria.

¹ Tenderers can find more information about the required documents on the following website: <http://ec.europa.eu/markt/ecertis/login.do>

AWARD CRITERIA

3. Selection criteria

a) General information

- (i) Tenderers must be able to prove that they meet the economic, financial and technical capacity requirements to perform the services set out in this call for tenders.

In the case of joint offers/subcontractors, the selection criteria will be applied to the grouping/consortium as a whole. The lead company must attach to the declaration on exclusion/selection criteria a breakdown per company of how the selection criteria are fulfilled. This attachment, giving details of the financial/economic/technical capacities of the company or companies on which the tenderer relies to fulfil the selection criteria, must be dated and signed by the legal representatives of the company or companies in question. The contracting authority will carry out a consolidated assessment to verify compliance with the minimum capacity levels set out in the selection criteria.

- (ii) The tenderer may rely on the capacities of other entities, regardless of the legal nature of the links it has with them.
- (iii) At any time during the procedure, the contracting authority may request the evidence listed below under point 3.b) to demonstrate compliance with the selection criteria. Tenderers must provide this evidence within 14 calendar days of the contracting authority's request.
- (iv) Any fraudulent or negligent misrepresentation of the information needed in order to verify that the selection criteria have been fulfilled will constitute grave professional misconduct.

b) Conditions for participation

(i) Economic and financial ability

The tenderer must provide a statement of overall turnover for the previous 2 financial years available, together with a copy of the balance sheets and profit/loss accounts and/or other supporting documents for the previous 2 financial years available. If the balance sheets and profit/loss accounts show an average loss during the previous 2 years, then tenderers must submit an additional document to prove their economic and financial capacity, such as proof of professional risk insurance coverage.

Minimum requirements/evidence

- = The tenderer's statement must demonstrate a minimum annual turnover of **750.000 EUR** during the last 2 financial years available.
- = The tender must provide a copy of the balance sheets and profit/loss accounts or other supporting documents for the previous 2 financial years available.

(ii) Technical ability

- Tenderers must provide a list of the **most relevant contracts performed or ongoing over the last 3 years** of a similar nature to this contract's supplies and services (supply, installation, maintenance and support of broadcast equipment/infrastructure)

AWARD CRITERIA

- = The contracts listed as references must demonstrate specifically the tenderer's ability to provide services in English and/or French and demonstrate professional standing, technical capability and possession of relevant professional experience for the provision of the type of supplies and services required by this contract. For each reference provided, information must be given about the client (public or private), the period of performance of the contract and the scope of the services (short description, volume and value of the contract).

Minimum requirements/evidence

The list provided must demonstrate that the tenderer has:

- (1) At least three **(3) references** must be provided corresponding to **accomplished audiovisual projects or contracts within the last five (5) years with a minimum contractual value of 100.000 EUR each**. For each reference, detailed information on the nature and volume of the supplies and services provided, including the client (incl. contact details) and the value of the contract, must be provided.
- (2) In addition, potential candidates must show their experience in the audiovisual engineering domain, specifically with integration of third party audiovisual products into an audiovisual file-based video production platform, by **describing in detail the outline of at least 1 Cinegy project, showing that it possesses adequate know-how of Cinegy Workflow and MAM installations;**

The template for the detailed description of the project(s) which should be used, is provided by the GSC in Annex II- 'Technical ability'.

V. **AWARD CRITERIA**

1. **Award method**

The contract will be awarded to the tenderer offering the **best quality (40%) / price ratio (60%)**, taking into consideration:

- the quality of the proposed services based on the award criteria detailed below;
- the financial offer (Annex V – Financial Tendering Form (Products Price list)).

2. **Quality criteria and quality evaluation**

Item	Quality criteria	Max. points	Min points
1.	Scenario on CRITICAL issue	100	60
2.	Scenario on Ticketing system (Daily troubleshooting)	100	60
3	Preventive maintenance and software updates	100	60
TOTAL QUALITY SCORE		300	180

If the tender scores for an individual criterion below its minimum points' threshold (as set in the table above), or if the total quality score is less than **180 points**, the contracting authority reserves the right to reject the offer.

AWARD CRITERIA

Tenderers will provide references to the relevant chapters, sections or pages of their technical offer regarding the above quality criteria in the form for completion Annex IV - 'Index to documents provided for the technical quality evaluation'.

a) **Criterion 1: Scenario on Critical issue**

We are in the middle of the peak of activity during a Council's high-level event, for which we have to publish a large number of media file exports related to this event (e.g. doorsteps of Head of states or governments, Press conferences).

In a normal workflow, the 3 required media files, exported from each video sequence in Cinegy (mp3, mp4 HD and mp4 Preview), need to be published on the Newsroom website no later than 20 minutes after the end of an event (doorsteps, roundtables, press conferences, etc.)

The file exports (compressions) from the video sequences sent by the video editors are not appearing in our publishing web platform Azure Blob Storage. Therefore, you are contacted by an official for immediate support.

Tenderers must explain how they proceed to diagnose the problem and describe the possible cause of the issue, including key steps and methods to propose a solution.

Evaluation:

- a) Diagnose and possible cause of the issue: 30 points
- b) Key steps and methods: 40 points
- c) Solution proposal and time frame for implementation: 30 points

b) **Criterion 2: Scenario on ticketing system (daily troubleshooting):**

We try to export a sequence with on-screen titles from Cinegy Desktop, but they do not appear on the exported video. A ticket is then opened by a media manager, using the ticketing system proposed by the tenderer.

Using the above info on this concrete example and in line with the relevant technical specifications and minimum requirements, tenderers must describe the workflow of the proposed ticketing system, as follows:

- Key steps and different consecutive status updates, including all different recipients involved. Take into consideration that the manufacturers may be using different/proprietary ticketing systems.
- Workflow, functionalities and features of the ticketing system used to process this ticket.

Evaluation:

- a) Key steps and status updates (40 points)
- b) Workflow, functionalities and features (60 points)

Note: For the evaluation purpose, the nature and cause of the problem are not relevant in this scenario, but rather how the issue is addressed through the ticketing system.

AWARD CRITERIA

c) **Criterion 3: Scenario on preventive maintenance and software updates**

The framework contract foresees two preventive maintenance sessions per year for the infrastructure, as described in the technical specifications.
Maintenance must be done onsite, at a date commonly agreed with the GSC.
The production platform and the test environment are accessible remotely to take prior information and for possible support (by the manufacturer).

For the purpose of the scenario, please use the hypothetical information provided below:

Current versions installed:

Microsoft:

Windows server 2016 Std
Windows 10 for desktop
Microsoft SQL server 2017 RC1

Cinegy:

Cinegy Archive-14.0.0.3435.3610
CinegyProcessCoordinationService_4.65.0.641
CinegyDesktop-15.1.0.4289.2093
Cinegy_Capture_21.11.193.49961
CinegyAir-21.9.0.4590.30813
CinegyConvert_21.10.79.42874

Available updates for the platform:

Windows updates:

For windows servers: 12 security updates, 8 critical updates and some optional updates
For windows workstations: 14 security updates, 10 critical updates and some optional updates

Cinegy updates:

Cinegy Archive 15.2.0.4053.24477 (Stable Version)
Cinegy Process Coordination Service 5.18.0.0 (Release Candidate)
Cinegy Desktop 22.11.0.4726.3716 (Stable Version)
Cinegy Capture 22.12.236.63935 (Release Candidate)
Cinegy Air PRO 22.12.0.4787.24509 (Stable Version)
Cinegy Convert 22.12.183.47930 (Release Candidate)

Based on the information above, tenderers must describe:

- Key steps, and/or necessary actions to **prepare** for this maintenance.
- Key steps and/or necessary actions for the onsite **implementation** of the preventive maintenance.
- Key steps and/or necessary actions, to **validate** this maintenance (tests). What would you propose if tests are not conclusive.
- All the points of attention and the necessary actions for the **Hardware (servers and workstations)** preventive maintenance.

AWARD CRITERIA

Evaluation:

- a) Key steps and actions for preparation: 30 points.
- b) Key steps and actions for the onsite implementation: 40 points.
- c) Key steps and actions for the final validation: 20 points.
- d) Points of attention and actions proposed for the related Hardware preventive maintenance: 10 points.

d) Evaluation method for the quality criterion 1, 2 and 3.

Each criterion will be evaluated according to a quality and performance level which is defined as follows:

ASSESSMENT	SCORE
The description corresponds perfectly to all points of the criterion. It is very convincing, understandable, clear, well-structured, concise, exhaustive, relevant and sufficient. It demonstrates the tenderer's very good understanding of the constraints involved in performing the services, making the GSC certain that the tenderer's resources and/or commitments are of very high quality. It contains no significant weaknesses or approximations.	85% to 100 % of the maximum score for the evaluated criterion
The description corresponds in a satisfactory manner to most points of the criterion. It is sufficiently convincing, understandable, clear, well-structured, concise, comprehensive and relevant. It demonstrates the tenderer's adequate understanding of the constraints involved in performing the services, making the GSC confident that the tenderer's resources and/or commitments are of high quality. Some aspects should have been better described, are described in too approximate a manner, or are missing.	70% to 84% of the maximum score for the evaluated criterion
The description corresponds in an acceptable manner to most points of the criterion. It is fairly convincing, understandable, clear, well-structured, concise, exhaustive, relevant and/or sufficient. It demonstrates the tenderer's fair understanding of the constraints involved in performing the services, giving to the GSC just an acceptable assurance that the tenderer's resources and/or commitments are of the required quality. It contains several weaknesses or omissions.	60% to 69 % of the maximum score for the evaluated criterion
The description is irrelevant and/or does not sufficiently correspond to the criterion. It is not sufficiently convincing, understandable, clear, well-structured, concise, exhaustive, relevant and/or adequate. It demonstrates the tenderer's insufficient understanding of the constraints involved in performing the services, failing to make the GSC certain that the tenderer's resources and/or commitments are of the minimum quality required. It contains too many weaknesses or approximations.	0 to 59% of the maximum score for the evaluated criterion

AWARD CRITERIA

The quality score will be calculated as follows:

$$\frac{\text{total quality score tender X (out of 300)} * 100}{300}$$

3. Financial evaluation

Tenderers must submit their financial offer on the form provided in Annex V.

The price that will be considered for the evaluation, will be the Grand Total resulting from the cost-calculation model set out in Annex V 'Financial Tendering Form (Products Price list)'.

The Grand Total = \sum (estimated volumes x unit price)

The cost-calculation model will be used for the purpose of comparing the financial offers during the evaluation and will not under any circumstances constitute a contractual obligation on the part of the contracting authority.

Tenderers may not modify the financial form. Partial financial tenders cannot be accepted.

Prices must be quoted in euro and rounded to two decimals both for unit and total prices, exclusive of VAT and all taxes and other charges.

The financial score will be calculated as follows:

$$\text{Financial score for tender X} = \frac{\text{lowest price}}{\text{price of tender X}} * 100$$

4. Award of the contract

The contract will be awarded to the compliant tenderer offering the best quality/price ratio, with a **40/60 weighting** between technical quality and price.

This will be calculated by multiplying:

- the result of the technical evaluation (number of points) by 0.40
- the result of the financial evaluation (number of points) by 0.60

The two results will be added together, and the contract will be awarded to the tender obtaining the highest score.

Financial score tender X * 0.60 + quality score tender X * 0.40

The scores will be calculated to 2 decimal places. If offers obtain the same score, the tenderer offering the lowest price will be awarded the contract.

VI. LIST OF ANNEXES

- TENDER SPECIFICATIONS

The documents listed below are annexed to the tender specifications:

- Annex I: Declaration on honour on exclusion criteria and selection criteria
- Annex II: Form for completion: Technical ability
- Annex III: Questionnaire for completion: Demonstration of conformity with the tender specifications - minimum requirements
- Annex IV: Form for completion: Index to documents provided for the technical quality evaluation.
- Annex V: Form for completion: Financial Tendering Form (Products Price list)

Informative annexes:

- Appendix 1: overview of structure of all tender documents (all annexes and appendices)
- Appendix 2: Checklist of documents to be provided by the tenderer
- Appendix 3: Schematic block diagram VPPP 2023

VII. CONTENT OF TENDER

Administrative information

Reference to tender specifications

1. Legal entity form & supporting evidence Administrative part point II.1
2. Documents required in case of joint offers/groupings/consortia and subcontracting Administrative part points II.2 & 3

Exclusion and selection criteria

3. Declaration signed by legal representative Evaluation part, point IV.2 / Annex I
4. Documents required for the evaluation Evaluation part, point IV and completed form 'Technical ability' Annex II

Technical Offer

5. Completed questionnaire: Demonstration of conformity with the tender specifications - minimum requirements Annex III
6. Completed form: Index to documents provided for Award criteria, point V.2 the technical quality evaluation Annex IV

Financial offer

7. Completed form 'Financial Tendering Form (Products Price list)' Award criteria, point V.3 Annex V

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