

INVITATION TO TENDER

ECMWF/ITT/2020/BOND09a

PROCUREMENT OF

Logistics Services

**for the Move of Data Centre Equipment and Tape
Media to Bologna, Italy**

Volume II:

Specification of Requirements

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Definitions

Definitions used in this Invitation to Tender (ITT) are listed here:

Acceptance	the process of performing tests on the Works to ensure that it reaches an acceptable condition to ECMWF
Acceptance Date	the date or dates set out in the Contract being the date or dates by which Acceptance must successfully complete
Centre	ECMWF
Contract	the documents defining the Parties' rights and obligations
Contractor	successful Tenderer
Data Hall	a space within the data centre that is used to host IT infrastructures and the high-performance computers and related services
Data Handling System (DHS)	large-scale Data Handling System is used to store and retrieve data that is needed to perform weather modelling, research in weather modelling and mining of weather data
ECMWF	European Centre for Medium-Range Weather Forecasts
Hosting Agreement	Agreement between the Government of the Italian Republic and ECMWF concerning the premises of the Centre located in Italy, dated 22 June 2017, and Supplementary Agreement between the Government of the Italian Republic and Regione Emilia-Romagna on the one hand and ECMWF, on the other, concerning the premises of the Centre located in Italy, dated 22 June 2017.
ITT	this Invitation To Tender
Lot	one of a number of categories of goods or services which a single procurement process has been divided into. Specifically, for this Tender there are two (2) Lots: <ul style="list-style-type: none"> • Lot 1 – Transport of IT Equipment • Lot 2 – Transport of Tape Media
OEM	Original Equipment Manufacturer
Preferred Bidder	the Tenderer selected by ECMWF for the award of this Contract
Requirement	a singular documented physical or functional need that a design, product or process aims to meet
Response	a response to this ITT
Respondent	an organisation participating in this ITT
Services	all the services listed in a Contract or on a Purchase Order, to be provided by the Contractor to ECMWF
Tender	a response to this ITT
Tenderer	an organisation bidding for this ITT
Works	all Services to be performed by the Contractor under this Contract
You	the recipient of this ITT, a prospective "Tenderer"

Background

Introduction

This Invitation To Tender (ITT) has been prepared by the European Centre for Medium-Range Weather Forecasts, (governed by its Convention and associated Protocol on Privileges and Immunities which came into force on 1 November 1975, and was amended on 6 June 2010) ("ECMWF") for the purposes of obtaining proposals from Tenderers for the procurement of Logistics Services to move tape media and data centre equipment from Shinfield Park, Reading, UK to its new data centre at Tecnopolo di Bologna, Via Stalingrado Bologna, Italy, in the Q2 2021. ECMWF is an independent intergovernmental organisation supported by 34 States. Information on ECMWF's activities can be found at:

<https://www.ecmwf.int/en/about>

Additional information on ECMWF's current Computer Environment can be found at:

<https://www.ecmwf.int/en/computing/our-facilities>

ECMWF's New Data Centre

In June 2017 ECMWF Member States approved the proposal by the Italian Government and the Emilia Romagna Region to host ECMWF's new data centre in Bologna. The new data centre is currently being built on the site of the new Tecnopolo di Bologna campus that is redeveloping the unused buildings and grounds of a former tobacco factory. ECMWF's headquarters are to remain in the UK. Details about the new data centre can be found here:

<https://www.ecmwf.int/en/about/media-centre/press-kit-bologna-host-ECMWFs-new-data-centre>

ECMWF expects the Bologna data centre will be run with a small staff complement, that includes a 24 hour a day, 7 days a week, 365 days a year (24x7x365) operations team responsible for the monitoring of the infrastructure.

In December 2019, ECMWF signed a contract for the procurement of a new High Performance Computer, which will housed in the new Data Centre, together with its associated hardware, including storage facilities. A critical part of this computing environment is the storage archives, which provides applications and users with an extensive repository of data, and the methods allowing an efficient access to this repository.

Scope of the ITT

The purpose of this ITT is for ECMWF to procure transport and packaging services to move a substantial amount of existing equipment and tape media from its Shinfield Park data centre in Reading, UK to its new data centre in Bologna, Italy. It should be noted that due to the nature of the equipment, most will likely be dismantled in the UK, packaged and rebuilt in Bologna by the OEM vendor. However for servers, switches and media, a more complete moving service could be offered, which would include de-racking, packaging, transporting and re-racking the equipment by the Contractor. Tenderers are required to provide a quote for insurance cover for the equipment and media transport, however ECMWF reserves the right to arrange such insurance with its own provider.

The ITT covers the procurement of two Lots as described in Appendix 2 (Specific Requirements):

- Lot 1 – Transport of IT Equipment
- Lot 2 – Transport of Tape Media

Tenderers may elect to tender for Lot 1, Lot 2 or for both Lots. Where a Tender covers both Lots, the Tenderer must submit separate prices for each Lot, but may also indicate a discounted price or percentage reduction for each Lot which will apply if ECMWF awards the Tenderer a contract for both Lots. For the avoidance of doubt, ECMWF shall be permitted to award a contract for one or for both Lots on the basis of the Tender/s submitted.

This ITT is for the initial purchase of services for each Lot as described in this document, followed by further purchases of additional services on a call-off basis over the life of the contract. Further purchases may include transportation between the UK, Italy and/or any other EU member state. The term will be for a minimum period of three (3) years, with ECMWF having the option to extend thereafter, on an annual basis, to a maximum term of five (5) years.

ITT Timetable

ECMWF envisages the below timetable for this ITT. ECMWF reserves the right to amend these dates at any point. If ECMWF decides to amend any of the dates or milestones portrayed below then it shall notify the Suppliers who have expressed an interest or Tenderers via the eProcurement portal.

Date	Description
1ST SEPTEMBER 2020	DATE FOR RELEASE OF TENDER BY ECMWF
5-9 OCTOBER 2020	OPPORTUNITY FOR SITE VISIT TO ECMWF SHINFIELD PARK
12TH OCTOBER 2020	CLARIFICATIONS CLOSE
27TH OCTOBER 2020	14:00 LOCAL UK TIME - CLOSING DATE FOR RECEIPT OF TENDER RESPONSE
LATE OCTOBER 2020	EVALUATION OF TENDERS
MID NOVEMBER 2020	PRESENTATION BY SHORTLISTED TENDERERS (DATES/TIME TO BE ANNOUNCED BY ECMWF)
MID DECEMBER 2020	IDENTIFICATION OF PREFERRED BIDDER AND APPROVAL OF THE EVALUATION PROCESS
EARLY JANUARY 2021	OPPORTUNITY FOR SITE VISIT TO ECMWF BOLOGNA
MID JANUARY 2021	COMPLETION OF CONTRACT NEGOTIATIONS
END JANUARY 2021	APPROVAL BY ECMWF
EARLY FEBRUARY 2021	CONTRACT SIGNATURE
FEBRUARY-MARCH 2021	FIRST TRANSPORT OF EQUIPMENT
MARCH 2021	FIRST TRANSPORT OF TAPE MEDIA
MAY-JUNE 2021	MAIN MOVEMENT OF EQUIPMENT

Table 1: Envisaged Timeline of this ITT

Evaluation method and selection criteria

Tenderers will be evaluated, utilising the criteria detailed in Table 2 below, based on both written proposals and any oral presentations to ECMWF. However, ECMWF reserves the right to use information other than that provided by the Tenderers in its evaluation.

The following are the key evaluation criteria and their associated weighting that will be used as part of the evaluation process. ECMWF will be looking for strong capability in all the following aspects:

Category	Weighting
<i>Price</i>	<i>30%</i>
<i>Tenderer's financial & corporate credentials</i>	<i>10%</i>
<i>Credibility and quality of approach/plan and time to deliver, run and support; safety of ECMWF data and equipment</i>	<i>40%</i>
<i>Quality and experience of team; track record of providing this type of service</i>	<i>20%</i>

Table 2: Key evaluation criteria

The evaluation of the Tenderer's Financial and Corporate Credentials will be based on the Tenderer's responses to Volume IA and to Appendix 1 of this document.

The evaluation of the Tenderer's compliance with Technical Requirements will be based on the Tenderer's response to Appendix 2 of this document.

The evaluation of the Tenderer's response to the Price criteria will be based on the Tenderer's financial submission in response to Appendix 3 of this document.

Evaluation process for Lot 1 and Lot 2

The evaluation process for Lot 1 and Lot 2 is identical and will be conducted in parallel and separately:

1. The first stage of the evaluation will be based on a full evaluation of the Tenders, including the response to Volume 1A, and will determine a shortlist of Tenderers for invitation to the second stage. Tenderers who are not shortlisted will not be considered further for this ITT.
2. The second stage may involve either a presentation / Q&A session on ECMWF premises in Reading by the short-listed Tenderer(s) and/or a site visit(s) for ECMWF staff to the premises of the shortlisted Tenderers to meet the team(s) responsible for the ongoing solution support. Both options should involve the key bidder staff nominated for this ITT and are expected to take place in accordance with the dates indicated in Table 1 - ECMWF envisages giving at least one week's notice of such. At these events, the Tenderer will have the opportunity to showcase the aspects of their proposed solution or solutions and both parties shall have the opportunity to clarify any outstanding elements of the ITT response. Following the event(s) and any subsequent clarifications, the shortlisted Tenderer(s) may be invited to submit their 'best and final offer' Tender to ECMWF, for final evaluation. A Preferred Bidder for the relevant Lot will then be established.

The Preferred Bidder(s) for Lot 1 and Lot 2 will be established after the relevant Lot's stage 2, or in the case of a combined single Contract for both Lots, after stage 2 evaluation has completed for both Lots.

Negotiations, contract award and variations

As a result of the processes defined above, a Preferred Bidder(s) will be established with whom final contract negotiations will be opened. ECMWF reserves the right to negotiate with one or more Tenderers before taking a decision on awarding the Contract(s). Within one (1) month following the notification of award of the Contract, any unsuccessful Tenderer may request, in writing, feedback from ECMWF on the evaluation of the Tenderer's Tender.

Please note that ECMWF reserves the right to vary the structure and timing of the evaluation dependent upon the number and quality of Tenders received.

ECMWF Questions during Evaluation

During the evaluation of Tenders, ECMWF reserves the right to ask questions to clarify aspects of Tenderers' submissions. ECMWF will expect Tenderers to answer such questions promptly (normally with one business

day of receipt). ECMWF will address questions by email to the contact you nominate in your Volume IA Tender Submission Form or via the procurement portal and you should therefore ensure that your contact monitors his/her emails and the procurement portal at all times during our evaluation.

Organisation of this document

In accordance with the evaluation method and selection criteria listed in the previous section, the remainder of this ITT is organised as follows:

- Tender Requirement Instructions;
- Appendix 1 Tenderer's Credentials;
- Appendix 2 Specific Requirements;
- Appendix 3 Pricing for Transportation Service, Further Call-Offs and Agreement;
- Appendix 4 Bologna Data Centre;
- Appendix 5 Shinfield Park Data Centre;
- Appendix 6 Mandatory Legal Clauses.

Tender Requirement Instructions

Tenderers should note that they need to ensure that Requirements are fully addressed, since a partial response may not be considered or evaluated. This includes the Requirements present in this section, in the appendices and in the embedded Excel spreadsheets.

In this document, Requirements are categorised by the bold notations **M**, **D** or **R** to the left of the pertinent section.

Requirement category	Definition
M	denotes a MANDATORY Requirement: a Requirement that must be adhered to, or a performance Requirement that must be met in order that the tendered solution can be accepted by ECMWF. ECMWF will not consider a tendered solution that fails to meet a mandatory specification Requirement (marked M) unless the tenderer offers valid reasons why the feature in question is either unnecessary for, or irrelevant to, the tendered solution or is deemed as an improvement over that specified.
D	denotes a DESIRABLE feature. The extent to which any Tender offers features listed as desirable (marked D) will be one of the factors taken into account in selecting the winning Tender. If offered, the feature must be included in the overall price for the Works.
R	denotes a REQUEST for information. A response must be given to all such requests. Requests for information (marked R) are intended to provide a description of the construction, philosophy, operation and the cost implications of the tendered solution in areas that are regarded as being of particular importance. A clear response to such requests will be of assistance to ECMWF in the Tender evaluation process.

Table 3: Categories of Requirements and their Definitions

With regard to the Tenderer's ability to accommodate the Requirements, the Tenderer must use the following schema for completing the **Detailed Description** column:

- When populating the **Detailed Description** columns, Tenderers should note that, where relevant, when addressing that a Requirement is met, Tenderers must give minimum sufficient detail to explain the way in which the Requirement is met - a simple expression, such as "compliant" or "agreed", will not normally suffice.
 - Unless stated otherwise, **the Detailed Description should be limited to about 250 words**. Where word counts above 250 words are allowed, the higher limit will be clearly stated. Any text above the maximum specified word count will not be evaluated.
 - Attachments/Annexes should not be submitted unless the Requirement expressly requests or authorises their submission.
 - Tenderers are reminded that referencing web sites or providing hyperlinks does not provide an acceptable means of informing their submission. Any references of these types will be ignored and will not be evaluated.
- Any additional features not listed in the ITT as Requirements, but which the tenderer feels may be relevant, should be clearly identified and supported by descriptive material.

- Note that ECMWF seeks focused responses, rather than responses which include a significant amount of standard marketing material. If you wish to include marketing material in your proposal documentation set, it should be provided as discrete documents and limited to only marketing material which is directly relevant to the response and marked as "Marketing Material". ECMWF reserve the right not to evaluate Marketing Material if it deems it to be irrelevant.

As this ITT comprises two Lots, where the Tender is responding to both Lots, a single "Detailed Description" which is indicated as being relevant to both Lots may be supplied, or if it is appropriate this field may be completed twice - once for each Lot.

Tenderers must address the Requirements listed in the table below together with the Requirements listed in Appendices 1 - 3.

Requirement number	Requirement	Detailed Description
M(1)	<p>Tenderers must ensure that all Requirements in this ITT are addressed and a response, in electronic format, is posted to ECMWF's eProcurement Portal prior to the deadline; partial responses will not be considered.</p> <p>N.B. efforts have been made to remove duplicate Requirements, where this may occur, please still address the Requirement and/or reference your first response.</p>	
M(2)	Tender documentation must be written in English.	

Tenderers should note that responses to all Requirements specified in Volumes I and II of this ITT must be submitted by the Tender Closing Date. Tenderers invited to make presentations or give presentations to ECMWF may be required to address the Requirements set out in Appendix 2.

Appendix 1 Tenderer's Credentials

A1.1. General Requirements

Requirement Number	Requirement	Detailed Description
M(3)	<p>Using Section 5 of Volume IA (Tender Submission Form), the Tenderer must provide an executive summary to describe the key aspects and advantages of its Tender.</p> <p>The executive summary must:</p> <ul style="list-style-type: none"> • Provide a top level description of the Tenderer's plan • Describe how the Tenderer will satisfy the technical and other Requirements set out in the ITT; • Define the advantages to ECMWF of accepting the Tender • Demonstrate the ability of the Tenderer to supply and support its solution • Describe the commercial and pricing benefits offered the Tenderer's solution • Where third parties are referenced in the Tender, describe the Tenderer's relationship with them and the way in which they will contract with them <p>The executive summary is intended to give ECMWF an overview of the Tender so that it can understand the Tenderer's approach. Tenderers are not expected to repeat detailed technical, pricing or other responses in their executive summaries.</p> <p>(The response to this question must be no longer than 1000 words).</p>	
M(4)	<p>Tenderers must list the core competencies of their organisation. This must include the details of what is considered to be the key areas supported by the organisation.</p> <p>(The response to this question must be no longer than 500 words).</p>	

M(5)	<p>Tenderers are invited to indicate their proposed account management structure as follows:</p> <ul style="list-style-type: none"> • describe your governance processes to manage an effective relationship and the successful delivery including roles and responsibilities of people involved from both sides, the frequency of the different meetings and the purpose of each meeting; • describe the key management dashboards and empirical information that you suggest are used to govern the relationship; 	
M(6)	Tenderers must confirm that they have the capabilities to provide the service and project support in English.	
M(7)	<p>Tenderers must provide detail and evidence of any Project and Quality Management certifications and to indicate any other certifications/accreditations/awards relevant to this Tender that their organisation holds.</p> <p>(The response to this question must be no longer than 500 words).</p>	
M(8)	<p>Tenderers must provide details of at least one project (together with references), which they have undertaken in the last three years where they have moved large amounts of Data Centre IT equipment or tape media.</p> <p>(The response to this question must be no longer than 2000 words).</p>	
R(9)	<p>Tenderers are invited to identify two other comparable projects (together with references) by completing Section 4 in Volume IA of this ITT.</p> <p>(The response to this question must be no longer than 2000 words).</p>	
M(10)	<p>Tenderers must confirm that the proposed services fully comply with each of the Mandatory requirements listed in all Annexes of all ITT Volumes.</p> <p>Further evaluation will not be undertaken for any response which does not provide compliance with the Mandatory requirements.</p>	

A1.2. Requirements for Presentations, Demonstrations and Visits

Requirement number	Requirement	Detailed Description
M(11)	Tenderers must confirm that, if requested by ECMWF, they are available to give a presentation of their Tender to ECMWF. The date of the presentation will be made known following receipt of Tenders.	

Appendix 2 Specific Requirements

A2.1. Description of equipment to transport

System Type	Package dimensions (hwxwd)	Number	Total Weight (KG)	Value	Level of packaging provided by OEM vendor or Centre
HPC Rack	220 cm x 80cm x 140cm	2	350		Packaged ready for transport
HPC Rack	220 cm x 80cm x 140cm	1	586		Packaged ready for transport
Disk drives box	500mm x 600mm x 800mm	2	73		Packaged ready for transport
Ancilliary cables box	600mm x 600mm x 600mm	1	30		Packaged ready for transport
				€1,034,696	

Table 4: Tranche E1 - HPC Servers and disk system dimensions, weight and value

System Type	Package dimensions (hwxwd)	Number	Total Weight (KG)	Value	Level of packaging provided by OEM vendor or Centre
Disk systems type I	8.7cm x 48.3cm x 55.6cm	130 disk enclosures	3,800	£ 975,000	Dismantled but not packaged for transport
Disk system type II	8.6cm x 45cm x 77cm	2 disk enclosures	68	£ 120,000	Dismantled but not packaged for transport
Disk system type III (racked in wooden crate)	226cm x 71cm x 112cm	4 units	4,500	£ 980,000	Packaged ready for transport
Disk drives	40cm x 75cm x 60cm	64 boxed sets of drives	1,000 (780g/disk)	(included above)	Packaged ready for transport, but may require pallets
Miscellaneous equipment					

Table 5: Tranche E2 - Disk system dimensions, weights and value

System Type	Package dimensions (hwxwd)	Number	Total Weight (KG)	Value	Level of packaging provided by OEM vendor or Centre
Servers	120cm x 56cm x 80cm	143 units	2,150 (15KG/server)	£ 950,000	None
Switches	30cm x 51cm x 51cm	6 units	90 (15KG/switch)	£ 70,000	None
Cabling	30cm x 40cm x 40cm	5 units	60 KG (12Kg/box)	£ 9,000	Boxed ready for transport

Table 6: Tranche E3 - Servers and Switches dimensions, weight and value

System Type	Package dimensions (hwxwd)	Number	Total Weight (KG)	Value	Level of packaging provided by OEM vendor or Centre
Tape library frames	120cm x 72cm x 78cm	30 units	12,300 (410kg/frame)	£ 300,000	Dismantled but not packaged for transport

Tape drives	30cm x 35cm x 100cm	19 pallets, 9 boxes per pallet	1,650 (10KG/drive)	£ 1,200,000	Dismantled but not packaged for transport
Tape media shelving	208cm x 156cm 39cm (EDP - MMEX)	8 shelving units	4,000 (500KG/Shelf unit)	£ 10,000	None

Table 7: Tranche E4 - Tape library systems dimensions, weight and value

A2.2. Description of tape media to transport

Media Type	Package dimensions (hxwxd)	Number	Total Weight (KG)	Value	Level of packaging provided by OEM vendor or Centre
LTO DR tape cartridges	2cm x 10cm x 11cm	30,000 cartridges	LTO - 200g/tape 6,000Kg	£ 720,000	<ul style="list-style-type: none"> • Temperature range: 15°C -25°C • Relative Humidity (noncondensing) range: 15-50% • Maximum wet bulb temperature: +26°C • Maximum rate of temperature change: 5°C/hour • The humidity rate of change must be <5%RH/hour • Ambient air conditions must be non-condensing at all times. • The cartridges must not be exposed to any magnetic field liable to damage the media.

Table 8: Tranche T1 - Secondary tape media dimensions, weight and value

Tape media	Cartridge dimensions (hxwxd)	Numbers	Weight Unpackaged (KG)	Value	Environmental conditions during transit
Enterprise tape cartridges	2.5cm x 11cm x 13cm	22,500 cartridges	IBM JE - 239g/tape 5,400Kg	£ 4,072,000	<ul style="list-style-type: none"> • Temperature range: 15°C - 25°C • Relative Humidity (noncondensing) range: 15-50% • Maximum wet bulb temperature: +26°C • Maximum rate of temperature change: 5°C/hour • The humidity rate of change must be <5%RH/hour • Ambient air conditions must be non-condensing at all times. • The cartridges must not be exposed to any magnetic field liable to damage the media.

Table 9: Tranche T2 - Primary tape media dimensions, weight and value

System Type	Package dimensions (hwxwd)	Number	Total Weight (KG)	Value	Level of packaging provided by OEM vendor or Centre
LTO DR tape cartridges	2cm x 10cm x 11cm	3,000 cartridges	LTO - 200g/tape 600Kg	£ 200,000	<ul style="list-style-type: none"> • Temperature range: 15°C -25°C • Relative Humidity (noncondensing) range: 15-50% • Maximum wet bulb temperature: +26°C • Maximum rate of temperature change: 5°C/hour • The humidity rate of change must be <5%RH/hour • Ambient air conditions must be non-condensing at all times. • The cartridges must not be exposed to any magnetic field liable to damage the media.

Table 10: Tranche T3 -- Remaining secondary tape media dimensions, weight and value

A2.3. Transportation Dates

Items	Expected Date	Tranche No.
HPC SERVERS AND DISK SYSTEM	FEBRUARY 2021	E1
DISK SYSTEMS	MID-MAY 2021	E2
SERVERS AND SWITCHES	LATE MAY 2021	E3
TAPE LIBRARIES, DRIVES AND RACKING	EARLY JUNE 2021	E4

Table 11: Lot 1 - Equipment to Move

Items	Expected Date	Tranche No.
DR TAPE MEDIA	MARCH 2021	T1
PRIMARY MEDIA	MID-MAY 2021	T2
REMAINING DR MEDIA	MID JUNE 2021	T3

Table 12: Lot 2 - Tape media to move

Requirement number	Requirement	Detailed Description
R(12)	<p>The envisaged timeline is given in Table 11 and Table 12 above. Do you expect there to be any factors that would influence a move around these dates. For any factors you identify, please explain the likelihood and propose what you could do to mitigate the risk.</p> <p>(The response to this question must be no longer than 1000 words).</p>	

A2.4. Logistics Requirements

Requirement number	Requirement	Detailed Description
M(13)	Tenderers must note the information and layout diagrams about the Shinfield Park and Bologna Data Centres in Appendix 1 and Appendix 5 and provide plans for the deliveries that take into account the features and restrictions of the sites.	

Requirement number	Requirement	Detailed Description
	<p>If tenderers propose to use vehicles longer than the recommended maximum length then tenderers must explain in detail how these vehicles can be accommodated and unloaded.</p> <p>(The response to this question must be no longer than 1000 words).</p>	
M(14)	<p>Tenderers must describe a plan for an individual journey ensuring the security of vehicles and equipment at all times. This should include:</p> <ul style="list-style-type: none"> • Details of vehicle type, size, capacity and suspension should be provided and the recommended number of vehicles required. • The most efficient route from Shinfield to Bologna with timing estimations, proposed rest stops, number of drivers should be provided. • An explanation of what protection and security is available during the transportation? For example, air sprung suspension lorries, any recommendations of lorry size, strategy and routing of moving the equipment and media to minimise the risk of damage or loss. • A description of checks you propose to perform to accept items for shipment. <p>(The response to this question must be no longer than 1000 words).</p>	
D(15)	<p>Excluding exceptional circumstances occurring on the journey, it is desirable that an Individual transportation from Shinfield Park, Reading to Bologna should be completed within a maximum period of 36 hours ensuring the security of vehicles at all times.</p> <p>(The response to this question must be no longer than 500 words).</p>	
M(16)	<p>The main move of media and equipment must be completed within three or four weeks. The majority of secondary media will be moved separately in advance and any damage assessed (estimated to take one month) before agreeing to proceed with moving the remaining equipment. Tenderers must provide a detailed break down of how they plan to move the tranches of equipment and/or media with timing estimates to conform to this three or four week period.</p> <p>(The response to this question must be no longer than 1000 words).</p>	
M(17)	<p>Given the sensitive nature of the tape media and the importance of preserving the primary copy of data, for which there is only one copy in some instances, secure packaging is essential and must include anti-static and shock protection.</p>	

Requirement number	Requirement	Detailed Description
	<p>Anti-tamper seals must be provided on all tape media transport containers.</p> <p>Tenderers must specify what packaging and environmental monitoring they will provide.</p> <p>(The response to this question must be no longer than 1000 words).</p>	
D(18)	It is desirable that flight cases with a capacity of about 500 tapes are provided for transporting the tapes.	
M(19)	Tenderers must be able to provide the packaging at least a week in advance of each media transport tranche.	
M(20)	<p>When packing and unpacking thousands of pieces of equipment, it is almost inevitable that minor accidents happen (server or tape dropped from low height, or knocked against a door-frame etc). To enable ECMWF to give special focus in checking those items, the tenderer must keep a log of all such events that might cause damage to the goods transported.</p> <p>(The response to this question must be no longer than 500 words).</p>	
D(21)	<p>It is highly desirable that the tenderer record all incidents that occur during the transport in a transport log as this will provide us a reference for testing and recovering from any damage.</p> <p>The information required in such a transport log is: Date and time, what was affected, what happened and what was done to recover.</p> <p>(The response to this question must be no longer than 500 words).</p>	
M(22)	ECMWF requires the ability to track the progress of the delivery. Please provide details of what vehicle tracking would be available to ECMWF during the move.	
M(23)	In addition to any monitoring provided by the tenderer, ECMWF will put it's own independent monitors (MSR175 or similar devices) inside some of the shipping containers. Tenderers should confirm that this is possible and state any restrictions.	
D(24)	It is desirable that in the event of a breakdown or accident during a transfer that alternate transport is available to complete the transfer. Tenderers should explain the options available and provide costs for any option suggested.	

Requirement number	Requirement	Detailed Description
M(25)	The tenderer must remove and dispose of all provided packaging.	
R(26)	What lead time do you require from signature of contract to first delivery of service?	

A2.5. Legal and Insurance Requirements

Requirement number	Requirement	Detailed Description
M(27)	<p>Please provide details for the Lot(s) you are responding to of what levels of insurance cover you provide for the services, and how responsibilities are apportioned during the different stages of the service.</p> <p>Please provide details of your current insurance policy and those that are intended to be in place for the duration of the proposed contract, namely:</p> <ul style="list-style-type: none"> • public liability; • products liability; • employer's liability; • professional indemnity. <p>(The response to this question must be no longer than 2000 words).</p>	
D(28)	<p>Please provide a copy of the insurance cover for the equipment and the media transport, together with an outline for:</p> <ul style="list-style-type: none"> • main insurance conditions; • responsibilities of the parties; • standard exclusions; • dispute resolution and/or arbitration clauses; • standard assignment procedure. <p>(The response to this question must be no longer than 2000 words).</p>	
M(29)	Dependant on the method and route of transportation recommended, there may be inter-border, customs, or other foreseen risks/issues with transporting the equipment and media over one of these borders. Please highlight these	

Requirement number	Requirement	Detailed Description
	together with any mitigation, taking into account ECMWF's special status as an International Organisation. .	
M(30)	Please provide, as a separate attachment, a copy of your standard terms and conditions for freight and transportation services. Please provide an outline on how the Mandatory Legal Clauses listed at Appendix 6 will become part of the contract, or embed them, as appropriate, into your standard terms and conditions. ECMWF reserves the right to negotiate the terms and conditions for any contract.	

A2.6. Financial Requirements

Requirement number	Requirement	Detailed Description
M(31)	If Tenderers are bidding on Lot 1 they will need to provide packaging to transport most of the disk systems in Tranche E2. The vendor will de-rack each of these systems, however with the exception of those packaged by wooden crate (see Table 5), they will just be wrapped in antistatic bubble wrap and/or clingfilm. Confirm that secure packaging can be provided for this number of systems.	
D(32)	It is desirable that Tenderers offer a full de-racking/re-racking service for the servers and switches in Tranche E3 of Lot 1. Please give details of the service offered and add the pricing into the summary spreadsheet. The servers and switches will all be powered off and cabling removed ready for collection. The Tenderer must provide the necessary packaging for transport of these servers and switches.	
M(33)	If Tenderers are bidding on Lot 2 they need to offer a full packaging and unpacking service for the tape media. Please give details of the service offered. The media will be removed from the tape libraries either via the I/O stations or by opening the doors to the library. ECMWF will remove the media from the libraries, but it will be the task of the Tenderer to package the tapes ready for transport. The same will be required in reverse at the destination. Tape media can be handed back to ECMWF staff to insert back into prebuilt libraries.	

Requirement number	Requirement	Detailed Description
R(34)	<p>Would your intent be to carry out the equipment and media moves directly or subcontract some or all elements of the move?</p> <p>Please list all entities you intend to subcontract and describe their role, contribution and level of involvement into the implementation of the contract/services.</p> <p>Please also describe any subcontractor management procedures you intend to apply.</p> <p>(The response to this question must be no longer than 2000 words).</p>	

Appendix 3 Pricing for Transportation Service, Further Call-Offs and Agreement

ECMWF expects to see full pricing transparency in your response with summary level views and itemised breakdowns (where applicable), and to be able to understand the figures without the need to clarify with the Tenderer in question.

Where applicable, please ensure that all and any conditions and/or restrictions are made explicit e.g. unanticipated expenditures (rush charges, etc.) and including the net pass-through of third party costs/commissions/discounts.

When providing full and transparent breakdown of any summary figures, be specific on how these are derived i.e. unit costs, day rates, quantities, discounts, exchange rate, how effort is split between phases of work, etc.

Acceptance of delivery tranches will be based on successful delivery to Bologna of all of the items within the tranche and a damage assessment. For equipment, this assessment will be to power on and check that the equipment is still functioning correctly. Minor correctable defects such as reseating memory in servers will be acceptable as will a very limited number of disk drive failures. For tape media in Lot 2, 2% of the media will be completely reread. If this is not successful, it will be judged to be a failed Acceptance. To avoid pre-existing issues with any of the sample media, the media will be read in Shinfield Park close to the date of its transport. The Acceptance of each Tranche will be completed no later than 30 days after it has arrived at the data centre in Bologna.

Note that ECMWF reserves the right not to contract the insurance cover for the equipment and the media transport with the Contractor, but to arrange its own.

Requirement number	Requirement	Detailed Description
M(35)	Tenderers must provide a summary of their pricing and discounts for Lots 1 and/or 2 using the spreadsheet "ITT_BOND09a Pricing Spreadsheet.xlsx" . No pricing or discount information should appear elsewhere in Tenders.	
M(36)	For the Transportation Service all prices must: <ul style="list-style-type: none">a. encompass the costs of the mandatory features as described in this ITT;b. be firm and fixed and quoted in Euro (€);c. be exclusive of all appropriate import duties and UK and / or Italian taxes;d. be valid for nine months after the closing date for receipt of tenders.	
M(37)	Tenderers must provide a description of the pricing mechanism which will be applied to ensure that the same level of pricing and/or discounts as those provided above are applied throughout the contract lifetime for any ad-hoc future purchases. Tenderers must also explain how they will demonstrate value for money.	

Appendix 4 Bologna Data Centre

Tenderers should note the following important information about the Data Centre in Bologna:

- Recommended maximum lorry length: 11M
- Maximum lorry length: 16M
- Maximum lorry weight: 40 tons
- Number of lorries at loading bay: 1
- Maximum number of lorries on site: 2 (public overflow lorry park in "via della manifattura", north boundary of Datacentre)
- Height of loading bay: 1.4m.
- Access to the loading bay is via an inclined slope
- Length of flat area before loading bay: 8.30m
- The loading bay is not under cover
- The contractor will need to move the shipment to the storage area by themselves.
- The contractor will need to provide all transpallet and other lifting devices required.
- Bologna Council are changing road layout around the Datacentre. That should be done in December.
- ECMWF will require one week's notice for any deliveries to site
- Normal access is from via Stalingrado and exit is to via Ferrarese
- Deliveries will only be accepted during normal working hours
- Equipment and media will be unpacked, before being moved into two data halls of 18m x 19m each.
- Only the data halls will be air conditioned.
- The two data halls can be used as temporary storage space, however any unpacking will have to be done in the storage or work areas and equipment brought back to the data halls.
- The tape media will be imported into pre-installed tape libraries or moved onto shelving space within. All equipment will have pre-allocated racks ready to be built into.
- Two temporary storage areas are available:
 - L = 15.6m W = 8.5m H= 3.5m;
 - L = 4.3m W = 8.5m H= 3.5m.

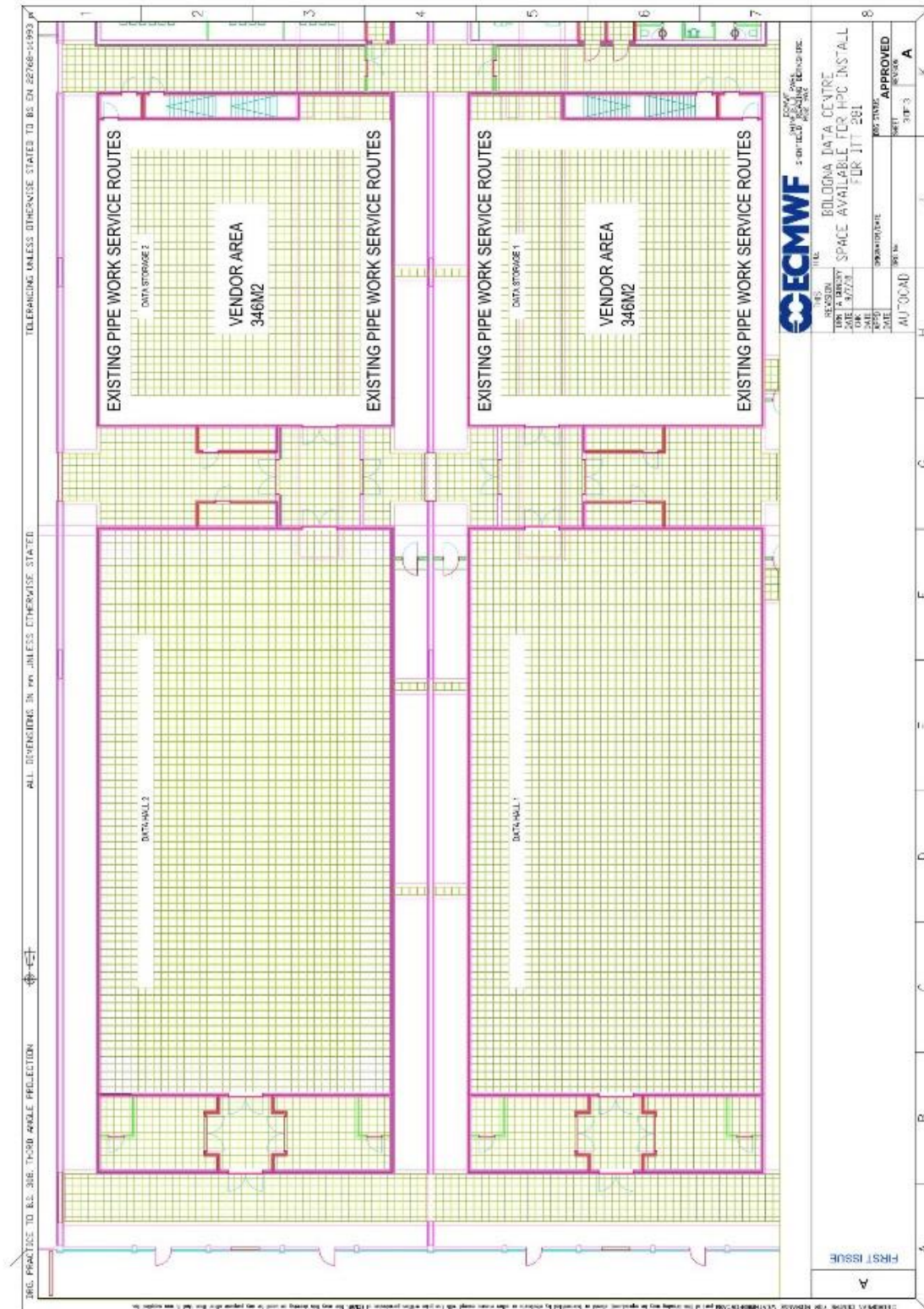


Figure 1: Bologna Data Centre Layout



Figure 2: Bologna Data Centre - Access Routes

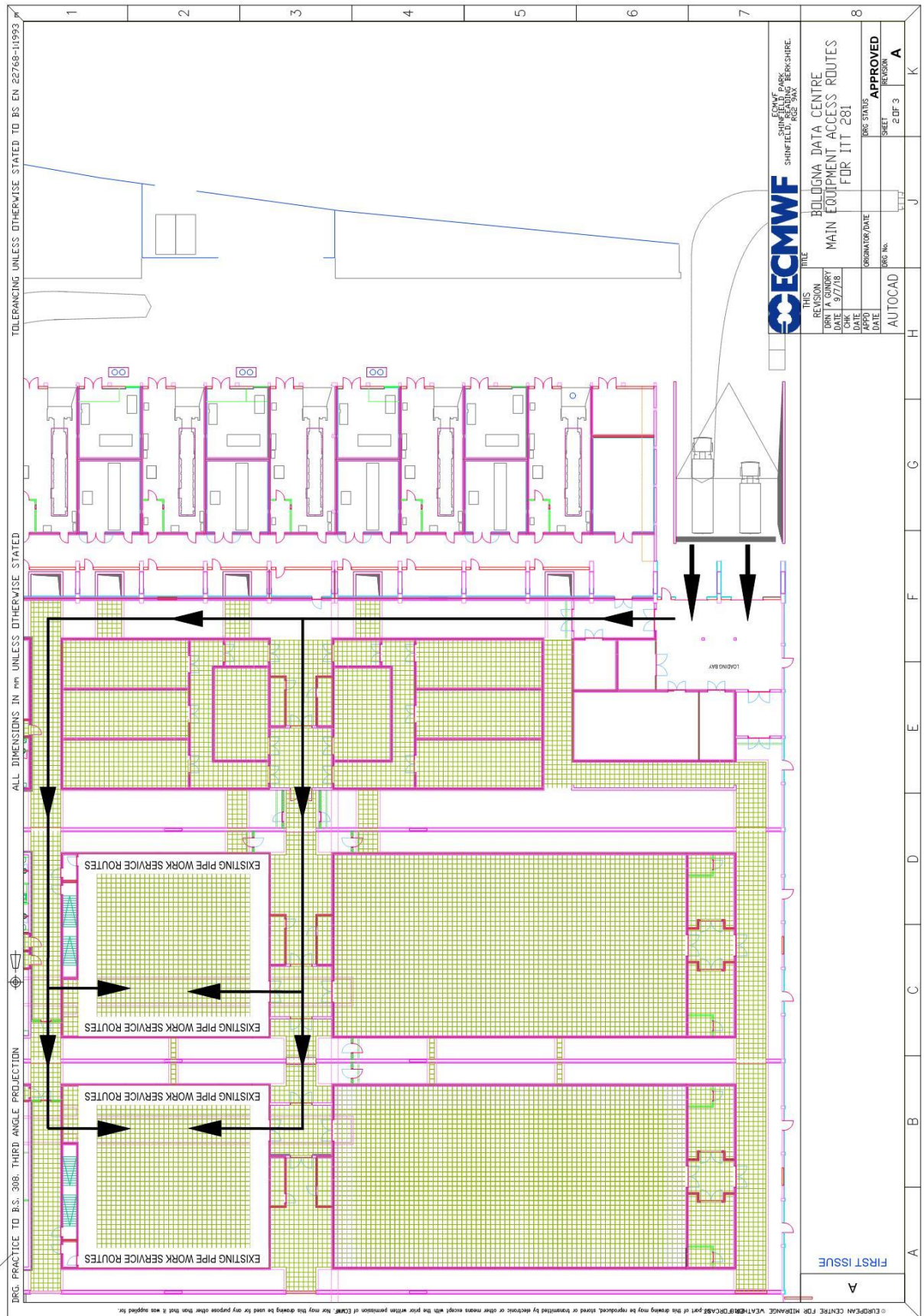


Figure 3: Bologna Data Centre – delivery route

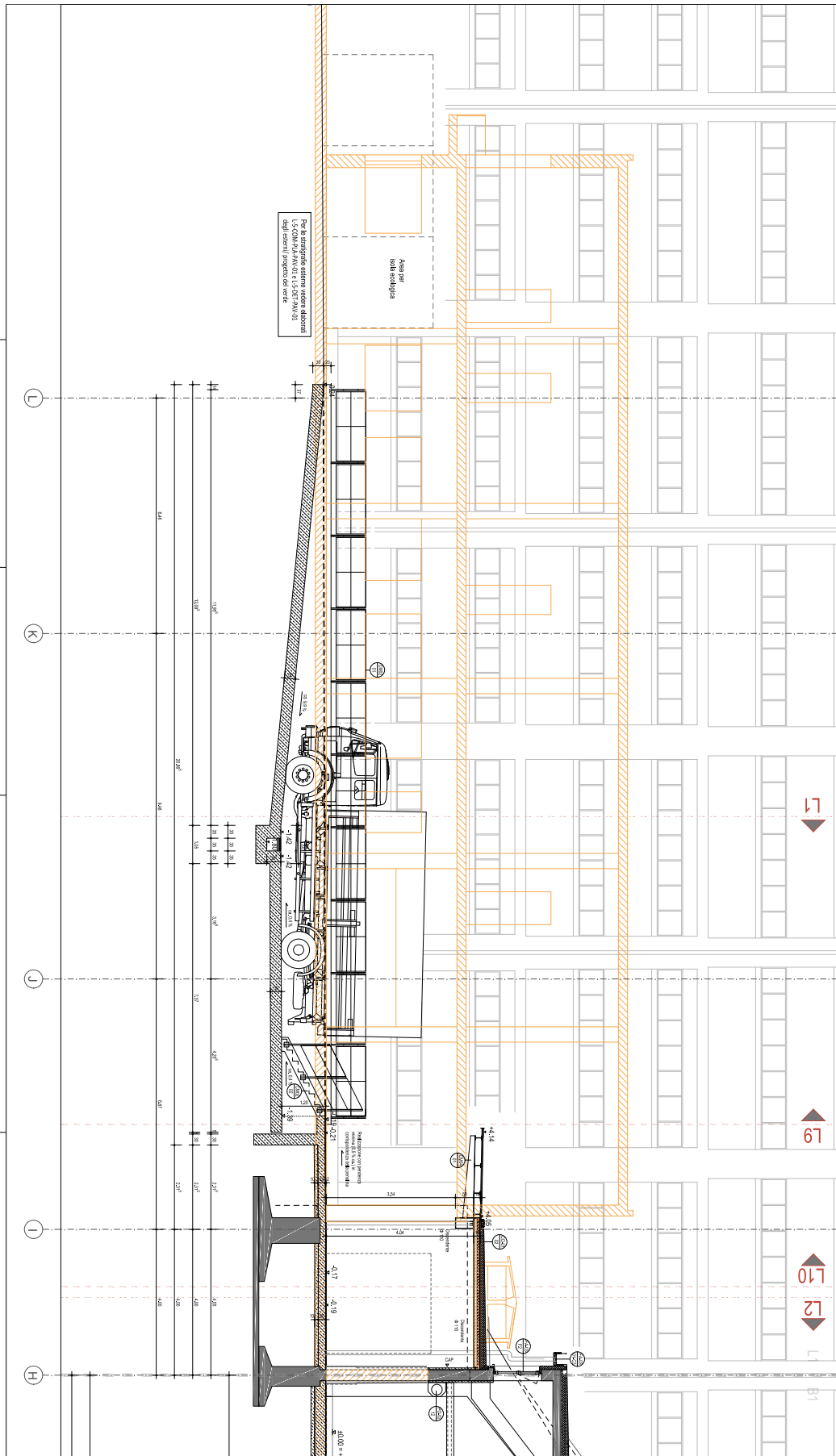


Figure 4: Bologna Data Centre - Loading bay access

Appendix 5 Shinfield Park Data Centre

Tenderers should note the following important information about the Data Centre in Shinfield Park:

- Maximum lorry length: No restrictions
- Number of lorries at loading bay: 1
- Maximum number of lorries on site: 2
- Height of loading bay: 1.4m, a scissor lift is available
- The loading bay is not under cover
- The contractor will need to move the shipment to the storage area by themselves.
- The contractor will need to provide all transpallet and other lifting devices required.
- Collections will only be allowed during normal working hours

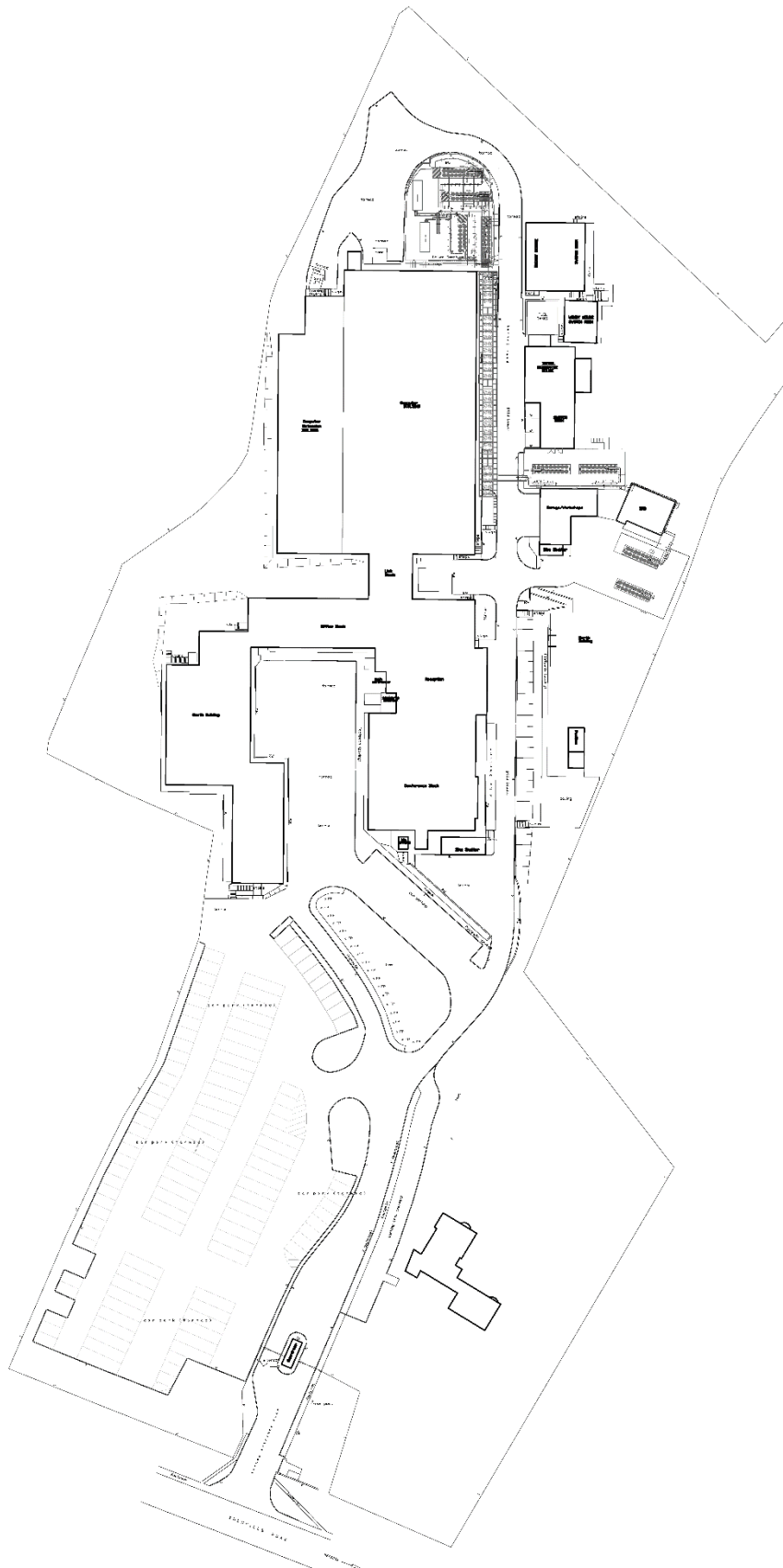


Figure 5: Shinfield Park Data Centre - Site plan

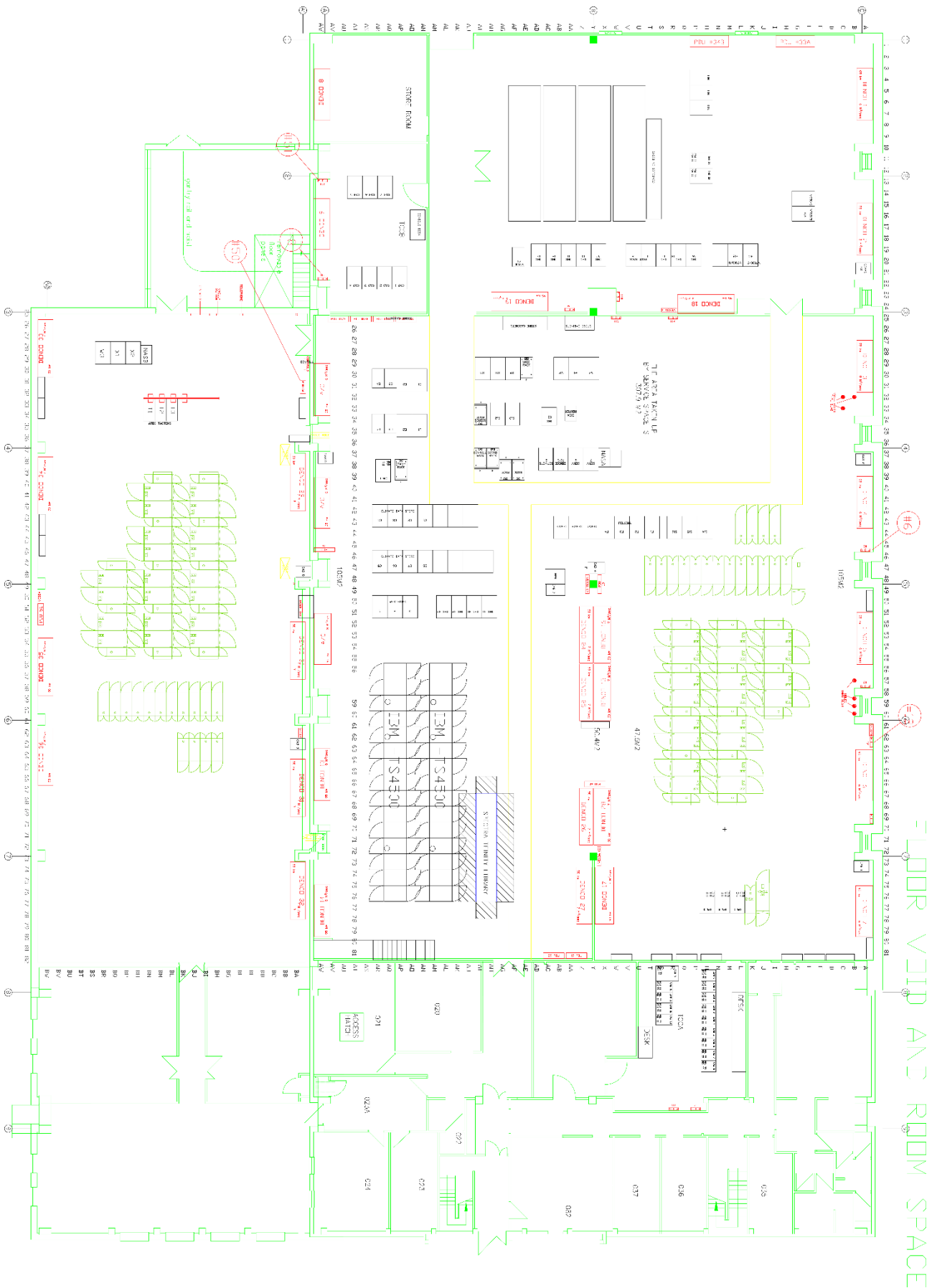


Figure 6: Shinfield Park Data Centre - Layout

Appendix 6 Mandatory Legal Clauses

Please note that as a result of ECMWF's immunity from jurisdiction, any future Contract resulting from this ITT must contain the following arbitration clause which is offered by ECMWF to all contracting parties:

"This Agreement [OR Contract OR Licence] is governed by and shall be construed in accordance with the laws of England and Wales. The parties shall attempt to settle any dispute between them in an amicable manner. If the dispute cannot be so settled, it shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by three arbitrators appointed in accordance with the said rules; sitting in London, England. The proceedings shall be in the English language and for the avoidance of doubt this arbitration agreement shall also be governed by the laws of England and Wales. In accordance with Sections 45 and 69 of the Arbitration Act 1996, the right of appeal by either party to the English courts on a question of law arising in the course of any arbitral proceedings or out of an award made in any arbitral proceedings is hereby agreed to be excluded.

Nothing in this Agreement [OR Contract OR Licence] is meant to be construed as a waiver of any of the privileges and immunities conferred upon ECMWF, an inter-governmental organization, through its Convention and Protocol."

Please also note that ECMWF is exempt from VAT:

(1) Supply contracts subject to Italian VAT must therefore contain the following VAT provision:

"As a rule, ECMWF is exempt from all taxes and duties, including VAT, pursuant to the provisions of Article 4 of its Protocol on Privileges and Immunities available at <https://www.ecmwf.int/en/about/who-we-are/official-documents>. ECMWF's Codice Fiscale no. is 91148050684. ECMWF does not undertake "economic activities". Therefore, it is not a taxable person under Article 9 of Directive 2006/112/EC as implemented in Italy by article 4 of the Presidential Decree n. 633 dated October 26, 1972. Consequently, ECMWF does not have a VAT number. Accordingly, the Contractor shall take all necessary steps to facilitate ECMWF's exemption from VAT which might otherwise be payable in relation to the order. For these purposes, it shall request the necessary instructions from ECMWF and provide in due time the information which ECMWF requires.

ECMWF will not pay any other taxes or duties relating to the Agreement [OR Contract OR Licence]."

(2) Supply contracts subject to UK and/or any other EU member state VAT must contain the following VAT provision:

"As a rule, ECMWF is exempt from all taxes and duties, including VAT, pursuant to the provisions of Article 4 of its Protocol on Privileges and Immunities available at <https://www.ecmwf.int/en/about/who-we-are/official-documents>. ECMWF does not undertake "economic activities". Therefore, it is not a taxable person under Article 9 of Directive 2006/112/EC. Consequently, it does not have a VAT number. Accordingly, the Contractor shall take all necessary steps to facilitate ECMWF's exemption from VAT which might otherwise be payable in relation to the order. For these purposes, it shall request the necessary instructions from ECMWF and provide in due time the information which ECMWF requires.

ECMWF will not pay any other taxes or duties relating to the Agreement [OR Contract OR Licence]."

Export:

"Where appropriate, it is the Contractor's sole responsibility to obtain the consent of the relevant authorities and ensure compliance with all legal, regulatory and customs requirements before exporting the various items of equipment or software prior to delivery. ECMWF shall co operate and make all reasonable efforts to assist the Contractor in securing such consent. The Contractor acknowledges that all items imported or exported by ECMWF under this [Contract OR Agreement] are deemed, by ECMWF and by virtue of its Convention and Protocol, as strictly necessary for the exercise of ECMWF's official activities and exempt from all prohibitions and restrictions on import and export across the ECMWF Member States."

Data Protection:

"Data Protection Law" the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulations; "GDPR") and any alternative data protection law applicable to the Parties;

1. Data Protection

1.1 In this Clause [*], “process”, “data processor”, “data subject” and “personal data” shall have the meaning given in the GDPR.

1.2 Where the processing of personal data by the Contractor is required under this [Contract OR Agreement], the Contractor shall process such personal data in accordance with Data Protection Law. If the Contractor processes personal data outside the European Economic Area (EEA), or allows such personal data to be accessed from outside the EEA, it shall do so in a manner which satisfies applicable Data Protection Law for the implementation of adequate safeguards for transfers of personal data to third countries not subject to an adequacy decision of the European Commission (e.g. under an agreement between the Contractor and the third-country recipient organisation using European Commission approved Model Contract Clauses or, in the case of the United States of America, covered by the Commission approved “Privacy Shield” or any subsequent similar arrangement).

1.3 The Contractor shall implement appropriate technical and organisational measures to ensure the security of personal data processed pursuant to this [Contract OR Agreement]. Upon termination or expiry of this [Contract OR Agreement] or upon ECMWF’s request, the Contractor shall either delete or return to ECMWF all personal data processed under this Contract, unless Data Protection Law requires otherwise.

1.4 If so required under applicable Data Protection Law, the Contractor shall designate a Data Protection Officer (DPO) and supply appropriate contact details of its DPO to ECMWF and the data subjects. ECMWF may publish that information through the ECMWF Websites for use by the data subjects, whose personal data is processed by the Contractor. The Contractor shall promptly report to ECMWF any change to the identity of the Contractor’s DPO.

1.5 The Contractor shall, without delay, pass on to the DPO of ECMWF any requests or complaints made by data subjects relating to the processing of their personal data in the exercise of their rights under applicable Data Protection Law. The Contractor shall provide, free of charge, all support necessary for ECMWF to respond to and/ or fulfil all such requests and complaints.

1.6 The Contractor shall notify ECMWF of any security incidents, events or weaknesses (e.g. data breaches or suspected data breaches) impacting or capable of impacting the security of personal data processed under this [Contract OR Agreement].

1.7 The Contractor shall process, or permit to be processed, personal data only for the purposes of the provision of the [Works OR Services] and shall ensure that personnel of the Contractor is subject to an obligation of confidentiality in respect of the processing of personal data under this [Contract OR Agreement].

1.8 For the avoidance of doubt, when processing personal information under this [Contract OR Agreement], sub-processors engaged by the Contractor may qualify as Subcontractors and checks and controls pursuant to this [Contract OR Agreement] may be carried out with the aim of ensuring compliance with this Clause 19.

1.9 ECMWF shall comply with its own policies and procedures in respect of the protection of personally identifiable information, which it deems adequate to those of the General Data Protection Regulation.

1.10 In processing personal data pursuant to this [Contract OR Agreement], the Contractor shall:

1.10.1 act only on instructions from ECMWF;

1.10.2 unless otherwise requested by ECMWF, process personal data only to the extent, and in such manner, as is necessary for the provision of the [Works OR Services];

1.10.3 ensure that appropriate technical and organisational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data;

1.10.4 from time to time, comply with any reasonable request made by ECMWF to ensure compliance with the measures mentioned in Clause 19.10;

1.10.5 not disclose or transfer personal data to any Subcontractors other than where strictly necessary for the provision of the Works and in such event the Contractor shall obtain ECMWF’s prior written consent to such transfer or disclosure;

1.10.6 not cause or permit personal data to be transferred outside the European Economic Area without ECMWF's prior consent;

1.10.7 provide at no charge such assistance as ECMWF may reasonably require in order for ECMWF to deal with any request for subject access under the Data Protection Law; and

1.10.8 comply with all relevant provisions of Data Protection Law.

1.11 The Contractor shall permit ECMWF or its authorised representatives to inspect and audit the Contractor's and its Subcontractors' data processing activities in relation to this Contract and shall comply (and shall procure that its Subcontractors comply) with all reasonable requests or directions by ECMWF to enable it to verify and/or procure that the Contractor or Subcontractor (as the case may be) is in full compliance with its obligations under this Contract.

1.12 ECMWF, an 'international organization' under Chapter V of the GDPR, shall comply with its own policies and procedures in respect of the protection of personal data, notably the Policy for Personally Identifiable Information Protection, as amended. ECMWF's DPO can be reached as follows: pii-protection-officer@ecmwf.int or ECMWF PII Protection Officer; ECMWF, Shinfield Park, Reading, RG2 9AX, United Kingdom.