



INVITATION FOR APPLICATIONS FOR SELECTION EXAMS TO FILL TWO STAFF POSITION AT THE NATIONAL SECURITIES MARKET COMMISSION (CNMV). SYSTEMS TECHNICIANS FOR THE IT DEPARTMENT

02/22

The positions to be filled in this process are the result of Royal Decree 407/2022 of 24 May 2022 approving the offer of public employment for 2022. These new appointments shall follow the **free access** system.

Selection will be governed by this framework. Applications represent the full acceptance thereof by all applicants. An affidavit shall be supplied at the request of the National Securities Market Commission (hereinafter CNMV) declaring that all the information provided is true and verifiable.

This selection procedure will adhere to the principle of equal treatment of men and women as regards access to employment, pursuant to Article 14 of the Spanish Constitution, Organic Law 3/2007 of 22 March 2007 and the Resolution of the Council of Ministers of 9 December 2020 approving the third plan for Gender Equality in the General State Administration and its associated or dependent Public Bodies, and will be governed by the following:

FRAMEWORK

ONE. Purpose of the invitation for applications

1. A selection process has been created to cover the positions shown below using the CNMV's general free access system for the following category and with the annual gross salary and place of work as stated:

Employment offer	Number of positions	Employment category	Gross annual salary	Place of work
2022	2	Technician level 7 (Afternoon shift)	37.477,72Euros ¹	Madrid

¹This remuneration will be updated with a 2.5% increase envisaged by Spanish Law 31/2022, of 23 December, on the General State Budget for 2023.



The positions will be assigned to the IT Systems Department in the CNMV offices in Madrid.

2. The CNMV is the body responsible for the supervision and inspection of Spanish securities markets and the activity of all their participants. The aim of the CNMV is to ensure the transparency of the Spanish securities markets and appropriate price formation, as well as to protect investors.

The advertised positions are attached to the IT Systems Department, the scope of which is regulated under CNMV Internal Regulations. The objective will be to carry out the following activities:

- Installation, maintenance and administration of network operating systems, communications systems and database managers.
 - Project start-ups and models of new IT subsystems.
 - Analysis and resolution of cybersecurity problems and other IT contingencies.
3. The employment contract will be indefinite, once the trial period has been successfully completed.
 4. The requirements set out in the invitation for applications and all the actions involved in its execution will be published on the CNMV website (<http://www.cnmv.es/portal/quees/Ofertas/empleo.aspx>) and the General Access Point (Administracion.gob.es - [Punto de Acceso General](#)).

TWO. Applicant requirements

To be eligible for the selective exams, applicants need to meet the following conditions at the cut-off date for the submission of applications and continue to meet them until the contract has been signed:

1. Nationality:
 - a) Spanish nationals.
 - b) Nationals from other European Union Member States or from a State from and to which free movement of workers has been agreed in international treaties entered into by the European Union and ratified by Spain.

- c) The spouses of Spanish and other European Union Member State nationals may also apply, irrespective of their nationality, provided that they are not legally separated. Children of the above who are under twenty-one years of age or over if dependent and those of their spouse may participate under the same conditions.
 - d) Any person not included in the preceding paragraphs who is legally resident in Spain may also apply.
2. Age: Applicants must be at least 16 years old and not older than any maximum mandatory retirement age that may be in force.
 3. Capacity: Applicants should have the functional capacity to perform the tasks required.
 4. Disqualification: Applicants must not have been dismissed for disciplinary reasons from any public administration or constitutional or statutory body of any Autonomous Community or have been declared absolutely or specifically disqualified from public office or employment through judicial ruling.

Foreign nationals must not have been disqualified or be in an equivalent situation, or have been subject to disciplinary action or equivalent which prevents their access to public employment under the same terms in their home country.

5. Qualifications: Applicants must hold a degree (Graduate, Engineer or Architect or Bachelor's degree), preferably in a technical subject or have met the conditions to be awarded one before the closing date of the application process.

Candidates holding degrees obtained abroad must have the corresponding certificate of accreditation or, where applicable, a certificate of equivalence. This requirement does not apply to applicants who have obtained recognition of their professional qualifications in a regulated profession pursuant to European Community Law.

6. Should any of the applicants not be able to complete the selection process or carry out any exercise of the same because of a duly accredited situation of risky pregnancy or childbirth, their situation will be conditional on completion of the process and to the passing the phases that have been postponed.

Sitting these exams may not entail a delay that undermines the right of the rest of the applicants to a resolution of the process within a reasonable time, to be assessed



by the panel. In all circumstances, the aforementioned exams will take place before the publication of the list of applicants who have passed the selection process.

Failure to present the aforesaid supporting documentation in due time and form will mean the exclusion of the candidate from the selection process.

THREE. Submission of applications

The deadline for submitting applications will be from 15th of March 2023 until 11:59 p.m. on 13th of April 2023 (both inclusive). Applications that are not received within the established period and manner will not be admitted to this process.

1. Addressee

Those who wish to take part in these exams should submit their application and necessary documentation as stipulated in this section to the General Secretary of the CNMV.

2. Obligation to undertake all procedures electronically.

Pursuant to that set forth in the First Additional Provision of Royal Decree 203/2021 of 30 March 2021, approving the Regulations for the electronic operation of the public sector, all the procedures related to this invitation for applications will be undertaken electronically.

All documentation (including corrections, where applicable) shall be submitted through the following channels:

- Through the CNMV virtual office (<https://sede.cnmv.gob.es/sedecnmv/sedeelectronica.aspx>) using the electronic signature systems provided for in Royal Decree 203/2021, following the established instructions (<https://www.cnmv.es/DocPortal/Ofertas/Procedimiento-Firma-Envio-Sede.pdf>)
- Applications may also be submitted through the remaining electronic registers of any of the subjects referred to in Article 2.1. of Law 39/2015.

If any applications are submitted in person, applicants will be required to re-present them electronically under the terms of Article 14 of Royal Decree 203/2021 of 30 March 2021.

If a duly accredited technical incident makes the ordinary operation of the systems impossible, the convening body may agree to extend the deadline for submitting applications or to approve an alternative means of completion and submission, which it will publish on the CNMV website (<http://www.cnmv.es/portal/queues/Ofertas/empleo.aspx>).



Should applicants not be able to complete registration and the selection process from abroad electronically, they may present it at the nearest Spanish embassy or consulate.

Notifications will be sent electronically by email to the address stated on the registration application by the applicant.

Pursuant to Article 12 of Law 39/2015, the CNMV will assist those candidates in the use of electronic means to facilitate their participation in the invitation if they need it. For any questions related to the application and/or electronic signature, candidates may contact the Electronic Office User Service on the CNMV's electronic platform by phoning 902 180 772, or via email to sedecnmv@cnmv.es (*these channels are exclusively used to advise electronic platform and register users on computer matters, not for sending documents*).

3. Documentation to be submitted.

Applicants interested in participating in the selection process shall submit the following documentation, adjusted to the official models that appear:

- 3.1. Application form signed by the applicant, pursuant to the standard model that that the CNMV has made available on its website.
- 3.2. For non-Spanish national applicants, a copy of their Foreigner Identification Number/passport/EU residence card/valid visa is required.
- 3.3. Applicants with a level of disability of 33% or more requesting an alteration of times and formats should attach the Technical Opinion issued by the Technical Assessment Body to their application as evidence of their disability. If no such express request is made, it will be understood that no adaptations are required. Adaptation will be carried out as provided for in the applicable regulations.
4. Documents submitted in a language other than Spanish must be accompanied by their translation into Spanish, verifying their veracity at the time of the final announcement of the appointment, if applicable.
5. Where it is stated in the application that the representative will act, authorisation of representation is to be provided in Section 6 of the application.
6. At any time during the selection process, the Selection Panel may request proof of the information contained in the curriculum vitae or application.

7. The personal data collected in the application for admission will be processed for the sole purpose of managing the selection examinations and the communications necessary for this. They will not be transferred or processed by third parties other than in the cases provided for in the Law or in the event that the intervention of professional third parties is necessary for the purpose of evaluating the examinations, which will be carried out in compliance with the regulations for the protection of personal data. The results of the examinations will be published on the CNMV's website, without identifying the applicant other than by application number, reporting the marks obtained in each examination and the disability status evidenced where applicable. The CNMV will take measures to ensure that this information is not indexed by internet search engines.

The data will be kept for the time necessary to fulfil the purpose for which they were collected and to determine the possible liabilities that might arise from said purpose and from the processing of the data. The provisions of the Spanish regulations on archives and documents will apply.

The legal basis for the processing of these data is compliance with legal obligations (the Securities Market Act, the Workers' Statute, Laws 39/2015 of 1 October and 40/2015 of 1 October and the revised text of the Law on the Basic Statute of Public Employees.) The CNMV is the Controller for the processing these data and publishes its data protection policy at (<https://cnmv.es/portal/Utilidades/Proteccion-Datos.aspx?lang=en>).

The data protection rights of applicants may be exercised by contacting the data controller electronically, through the electronic office of the CNMV or in person through the network of assistance offices in matters of registration. Data subjects may also exercise their rights with the Spanish Data Protection Agency at <https://www.aepd.es/es>.

FOUR. The selection process and formalisation of the contract

1. At any time during the selection process, the selection body may require proof of the identity of the applicants. If there is evidence that a candidate does not meet any of the stipulated requirements, there shall be a hearing with the person concerned and they shall be excluded, where appropriate.
2. After submitting the application, a reference number will be assigned that will be emailed to the address provided by the applicant. This reference number will be used to identify each application throughout the entire process.



3. Within a maximum of one month of the closing date for applications, the CNMV will publish the date, place, and time for the first part of the exam phase in its General Register and on its website.
4. Excluded candidates will have ten working days from the date following publication of the Resolution to rectify any omission that may have led to their exclusion.
5. Within a maximum period of one month from the date of completion of this rectification period, the final list of those admitted to the selection process will be made public.

Those who do not meet the general and specific requirements will be excluded, as will those whose applications do not contain all the required information or which have been filled in incorrectly and the errors that led to the exclusion have not been amended.

6. Once the evaluation and selection phases have been completed, the Selection Panel will approve the list of qualified candidates who have passed this part of the process. They will then be placed in order from the highest to the lowest score, together with the list of successful candidates whose number may not exceed the number of positions included in the initial announcement, which will then be submitted to the convening body for its determination and publication.

If two or more candidates have the same score, the candidate scoring higher in the oral exam and personal interview will be preferred.

7. Within a maximum period of twenty working days from the date the decision of successful bidders is made public, successful candidates are required to submit the documentation demonstrating compliance with the requirements of the appointment procedure.

The following specific documentation may only be submitted electronically:

- i. Original documentation or an authenticated copy that confirms that the applicant holds an academic degree as required for appointment.
An original certificate or an authenticated copy of having completed the studies and paid the fees for the issuance of the certificate will also be accepted.

The degree may also be accredited by means of the certificate of correspondence between official university degrees (MECES).

Applicants with qualifications obtained abroad must submit the corresponding accreditation or certificate of equivalence as the case may be.

- ii. Also required is an affidavit that corresponds to the “Declaration of Responsibility” model that on commencement of the provision of their services to CNMV they are not engaged in any other public or private professional activity that might require prior authorisation or a recognition of compatibility with public service and that they do not receive any retirement or other pension in recompense for public service or under any public or mandatory Social Security system.
 - iii. In the case of successful candidates from states outside the European Union, they should provide the legally required documentation for the formalisation of the contract.
8. If the selected candidate does not submit the documentation stated in Rule Seven within the established period, regardless of the reason for not submitting it, or where the candidate does not meet the requirements, withdraws, or does not meet the trial period in these rules, the Organising Panel will award the position to the following applicant according to the order of priority defined in the CNMV Resolution of the Presidency, with the list of qualified applicants who have passed the selection process duly published.
9. From the moment that the contract is formalised, CNMV staff are subject to the general rules on incompatibilities for public employees, in particular Law 53/84 on incompatibilities for personnel at the service of public administrations, as well as the specific rules that are included in the Internal Regulations of the CNMV and the General Code of Conduct for the members of the Commission.
10. Candidates who pass the selection process shall take up their positions within a maximum period of three months from the publication of the Resolution of the Presidency approving the list of qualified applicants who have passed the selection process and the list of successful applicants.
In all circumstances, the position will become effective after the signing of the corresponding contract, within fifteen days of the CNMV’s formal requirement.
11. The probation period will last six months.
12. At the end of the probationary period, the person selected will become a permanent employee.



FIVE. Selection body

1. Pursuant to Article 14 of the Spanish Constitution, the selection board shall enforce strict compliance with the principle of gender equality.

2. The board comprises the following members in this instance:

a: Selection panel: Chair: José Ramón Zuazua Fernández
Secretary: María Iglesias Martínez
Members: Mario Nevares Moreno

b: Alternate panel: Chair: David Martín Cuesta
Secretary: Silvia Risco Monterroso
Members: M^a Jesús Gutiérrez Muñoz

A brief professional CV of the people who form part of the panel will be published on the CNMV website.

For those exercises that require immediate correction, the daily composition of the panel may be three members, appointed by the Chair.

3. Membership of the selection panel will always be on an individual basis. The post cannot be held as a representative of another person.

4. The panel will be responsible for the consideration, verification and appreciation of incidents that might arise in the exercises. It will adopt the decisions in this regard that it deems pertinent.

5. The selection panel's procedures will be adjusted at all times to that provided for in the Common Public Administration and General Administrative Procedures Act 39/2015 of 1 October 2015 and especially to the rules applicable to professional bodies as set forth in the Public Sector Legal Regulations Act 40/2015 of 1 October 2015, the Transparency and Access to Public Information and Good Governance Act 19/2013 of 9 November 2013 and other current provisions. Their powers will be those necessary for their correct operation, including the marking of exercises.

6. The selection board is empowered to interpret the rules governing this selection process and resolve any incidents that may arise in the course of the exams.

7. In the minutes of its meetings, the panel shall record any agreement that affects the determination of the grades awarded for each exercise, acting in accordance with the provisions of Royal Decree 407/2022 of 27 July 2021 which approves the public employment offer for 2022.
8. If any candidates with disabilities apply, the selection panel may adapt the format and timing of the exams on request in order that the candidate might take the test under normal conditions.
9. The selection board shall be constituted by a meeting attended by its chairperson, secretary and at least half its permanent or alternate members. It will be constituted within a maximum of thirty days of being appointed.
10. Once the selection panel has been constituted, its resolutions need the presence of a majority of its members, permanent or alternate.
11. In carrying out the various phases of the selection process, the selection panel may make use of external technical assistance from specialist advisers if it deems this to be necessary.
12. The selection panel will comply with the grounds for abstention and challenge as provided for in Articles 23 and 24 of Law 40/2015.
13. Where appropriate, the selection panel will make public the correction templates of those selection processes that include exams with alternative answers within a maximum of two days from the end of the specific exam.
14. The selection panel will apply principles of austerity and diligence when organising and approving the selection processes.
15. The selection body may adopt the necessary measures, instructions or resolutions to decentralise exam performance if it deems it appropriate.
16. Appeals against the decisions of the selection body issued throughout the process may be filed with the convening authority, pursuant to the provisions of the Common Public Administration and General Administrative Procedures Act 39/2015 of 1 October 2015, the Public Sector Legal Regulations Act 40/2015 of 1 October 2015 and other applicable regulations.



SIX. Selection system

1. The system used for candidate selection will be the open competition system.
2. The exam process will consist of four parts:

- 1) Part one: English.
- 2) Part two: written multiple choice exam.
- 3) Part three: written exercise – problem solving.
- 4) Part four: oral exam.

2.1. Part One: English.

This exercise will be eliminatory.

It will consist of a TOEIC (English for International Communication) exam in two parts, Listening and Reading, with 100 questions each: the first aims to assess the level of English in terms of oral comprehension and the second, written comprehension.

The questions are multiple choice, with only one correct answer. Unanswered or wrongly answered questions are not penalised.

The maximum score of this exam is 990 points based on the TOEIC scale. A minimum of 550 points (or equivalent in the opinion of the panel) must be obtained to pass, equivalent to level B1 of the Common European Framework of Reference (<http://europass.cedefop.europa.eu> and www.coe.int/portfolio).

The test will last no more than two and a half hours.

Candidates who have passed this examination will be assigned the following score:

	Points TOEIC (English for International Communication)	Points assigned
Listening & Reading	550 – 780 points (equivalent to B1)	0 points.
Listening & Reading	785 – 940 points (equivalent to B2)	2 points.
Listening & Reading	945 – 990 points (equivalent to C1)	4 points.

The selection panel will publish the lists of candidates who have achieved the required standard of English in Part One in the General Register of the CNMV and on its website (<http://www.cnmv.es/portal/quees/Ofertas/empleo.aspx>) and the marks they have obtained.

Notification of this second part will be issued at least 72 hours before it takes place.

2.2. Part Two: written multiple choice exercise

This will consist of answering in writing a list of questions in examination format, short questions or a combination of both, and will cover subjects included in Annex I.

In this exercise, knowledge of the following should be shown:

- Operating systems.
- Service-oriented architecture.
- Data structures. Databases
- Office systems.
- Communications, internet, cloud services and blockchain.
- Electronic administration, cryptography and electronic signatures.

Two hours and forty minutes will be allocated for this exam.

This part will be scored from 0 to 30 points. Candidates who fail to obtain a minimum of 15 points will be eliminated from the Part Three of the process.

Before Part Two is sat, the selection panel will make public on the CNMV website the criteria for correcting, assessing and passing the exam, as well as the penalty incurred for each wrong answer in the case of multiple choice questions. Such criteria are not expressly stipulated in these rules.

The selection panel shall publish the list of the marks obtained by candidates who have passed Part Two (as described in the paragraph above) in the General Register of the CNMV and on its website (<http://www.cnmv.es/portal/quees/Ofertas/empleo.aspx?lang=en>). They will be invited to sit Part Three at the place, date and time indicated. Notification of Part Three will be given at least 72 hours before it takes place.

2.3. Part Three: written exam.

This exercise will require the development of a topic, the detailed answer to a set of theoretical and practical questions and possibly the resolution of practical cases in relation to the subjects that appear in ANNEX II.

In marking this exercise, the demonstration of theoretical and practical knowledge of the proposed topics, the capacity for development and orderly reasoning of the topics and the knowledge and mastery of the techniques appropriate to the resolution of the proposed problems or exercises will be evaluated.

The maximum time allocated for this test is four hours.

This part will be scored from 0 to 60 points. Candidates who fail to obtain a minimum of 30 points will be eliminated.

Before this third part, the selection panel will publish the criteria for correcting, assessing and passing the test, which are not expressly stipulated in the rules of this invitation on the CNMV website, and in the case of exercises with alternative answers, the penalty for each wrong answer.

The Selection Panel will publish the list of candidates who have passed Part Three in the General Register of the CNMV, and on its website (<http://www.cnmv.es/portal/quees/Ofertas/empleo.aspx>), stating the scores obtained by each candidate and they will be invited to sit Part Four at the place, date, and time indicated. The call for this fourth part will be issued at least 72 hours before it takes place.

2.4. Part Four: oral exam.

Candidates will have to read the subject matter, practical case or answers to the questions that the Panel selects from among those submitted in the previous part in a public session in front of the selection panel.

Following the applicant's reading, the selection board will conduct a dialogue with the candidate on aspects of the developed theme, selected questions or practical cases, as well as any other area that helps them to assess whether the candidate has the preparation and professional experience to fill the position outlined in Rule One, Section 2. The board will also assess the candidate's suitability for the post, initiative and organisational capabilities, oral

communication skills and interest in joining the organisation in the aforementioned position.

This test is scored from 0 to 30 points. Candidates must obtain a minimum of 15 points to pass.

Candidates in each of the two processes will be called to read their papers to the Selection Panel in alphabetical order of surnames, beginning with the letter “U”. If no candidate’s first surname begins with the letter “U”, the Panel will start with “V”, and so on, as established in the Resolution of the Secretary of State for Public Administration of 9 May 2022 (published in the Official State Gazette on 13 May 2022).

The selection panel will publish the list of candidates who pass Part Four in the General Register of the CNMV and on its website (<http://www.cnmv.es/portal/quees/Ofertas/empleo.aspx>), indicating the score obtained by each.

3. The final score will be determined by the total points obtained in the four parts of the exam.
4. The maximum expected duration of the selection process will be nine months. The first part of the selection phase described in Rule 4 will be carried out within a maximum period of three months from the publication of the invitation.

From the final conclusion of an exercise or test until the beginning of the next, there will be a maximum period of forty-five calendar days.

This shall have no bearing on the publication of a resolution that justifiably announces an extension of these deadlines.

The selection body will publish a schedule with the approximate dates for the exercises.

SEVEN. Employment pool

1. Creation of an employment pool

Pursuant to the provisions of Article 3.21 of Royal Decree 407/2022 of 24 July 2022 approving the offer of public employment for 2022 for the purpose of selecting staff to cover temporary analyst posts, an employment pool will be formed of applicants who have passed at least three of the exams.



2. Order of calls

The order of the pool will be established by first taking account of the number of exams passed. If the same number of exams has been passed, the scores obtained in them will be totalled. If two or more candidates have the same score, the candidate who scored highest in the oral exam and personal interview will be preferred.

3. Period of validity

The list of applicants included in the employment pool will be made public and will be valid for 24 months from its publication unless there is a new identical invitation for applications before this.

4. Grounds for exclusion from the employment pool

- a) Failure to comply with any of the requirements set forth in the invitation for applications.
- b) Rejection of an offer of employment without justified cause of force majeure.

Candidates will keep their place on the list and will be able to access the next contract that is offered in the following cases:

- a) Those who are ill, provided that they can justify this situation through the corresponding official medical report or there is some demonstrable cause of force majeure that is accepted by the contracting body.
- b) Those who at the time of the call can demonstrate that they are providing services in the public or private sector.



EIGHT. FINAL RULE

A subsequent appeal for reversal may be filed against this call for applications with the convening authority within a month of its publication, pursuant to the provisions of the Common Public Administration and General Administrative Procedures Act 39/2015 of 1 October 2015. A contentious-administrative appeal may be filed with the National High Courts, within two months of its publication, as provided for in Article 9.1 (a) of the Contentious-Administrative Jurisdiction Act 29/1998 of 13 July 1998, meaning that, in the event of lodging an appeal for reversal, a contentious-administrative appeal may not be filed until it is expressly resolved, or the presumed dismissal thereof has occurred.

ANNEX I

1. Basic technology

1.1. 1.1 Operating system principles. Components and functions. Trends and evolution. Multitasking management. File systems.

1.2. 1.2 Types of multi-user information systems. Application and data servers. Server farms. Virtualisation: concepts and applications.

1.3. Client-server architecture. Service-oriented architecture.

1.4. Data structures. File organisation. Algorithms. Information and file formats.

1.5. Database technology. Corporate data management. Transactional systems, data warehouse. OLAP architecture. Big data, business intelligence and artificial intelligence.

2. Office and departmental IT

2.1 Personal IT tools. Microsoft 365 apps. Email. Messaging with digital certificate.

2.2 Access control: identification, authorisation, auditing. Role-based access.

2.3 Optical character recognition and biometric recognition. Current technologies. Practical applications.

2.4 Adaptation of the systems to the requirements of data protection regulations based on the necessary levels of security. Encryption and auditing tools.

3. Communications and internet

3.1 TCP/IP architecture. Network communication protocols: SSH, HTTP, HTTPS, FTP, SFTP etc.

3.2 Wireless networks. Functional and technical characteristics. Access systems. Authentication. Security, regulatory policy.

3.3 Internet. Network architecture. Services: email, WWW, FTP, Telnet. Web 3.0.

3.4 Architecture of intranet and extranet networks. Concept, structure and characteristics. Implementation in organisations.

3.5 Cloud computing. IaaS, PaaS, SaaS. Private, public and hybrid clouds.

3.6 Blockchain technology. Main technical characteristics. Areas of use.

3.7 Container technology and container orchestrator.

4. **Information society**

4.1 Basic cryptography principles. Symmetric and asymmetric encryption. HASH function. Electronic certificates. Secure protocols.

4.2 Electronic administration – advantages and disadvantages. National Interoperability Scheme. Social media

4.3 Electronic signature. Smart cards. Use for encryption and electronic authentication.

4.4 Providers of electronic certification services. Standards. Possible models and implantation characteristics. Situation in Spain.

ANNEX II

1. Systems technology

1.1 Supervision and optimisation of operating systems. File systems. Directory services. Printing services. Resource management: disks, memory, peripherals etc.

1.2 Storage models. Network storage systems: SAN and NAS. Consolidation of corporate storage.

1.3 Current technology and trends in server architecture. Blade servers: functionalities, advantages and disadvantages.

1.4 Physical and logical security technologies. High availability and redundancy systems. Protection against viruses. Environmental alarms.

1.5 Virtualisation. Virtual operating systems. Virtual storage systems. VMware Vsphere – latest versions. Workplace virtualisation. VMware/Citrix – latest versions.

1.6 Technologies for the job. End User Interfaces. User Management. System access control. End user support tools. Computer security of the job.

2. Operations management and production

2.1 Preparation of work and exploitation of processes. Planning and process control. Technical specifications.

2.2 Equipment and facilities maintenance plan. Unattended facilities. Preventive, corrective and perfective maintenance. Monitoring and management of different IT resources. Microsoft Active Directory: user and team management, group policy management.

2.3 Administration of the operating system and base software. Change control. Microsoft Windows/Linux – latest versions.

2.4 Administration of database management systems. Administration of accesses, privileges, data and procedures. Microsoft SQL Server – latest versions.

Microsoft Transact-SQL language. Big data Hadoop and similar environments. NoSQL databases.

2.5 Security plan. The National Security Scheme. Backup Systems. Disaster recovery plan. Safeguarding policies. Alarm control.

3. Networks and communications

3.1 Telematic networks. Local and wide area networks. Network hardware and software.

3.2 Network planning and management. Routing control, congestion and service quality. Tools.

3.3 Quality and security in communications. Bandwidths. Security policies and tools. VLAN segmentation. Access Control Lists (ACLs).

3.4 Protocols: transport (TCP and UDP). Simple network management protocol (SNMP). Dynamic host configuration (DHCP).

3.5 Wiring systems and network interconnection equipment. Wired and wireless links. Types and characteristics. Wi-Fi, Bluetooth and infrared.

3.6 Videoconferencing systems, audioconferencing. Group work tools. Streaming the video. Mobile communications. MDM technology. Voice over IP.

4. Internet/Intranet technology

4.1 Internet/intranet networks: the DNS namespace. Records of resources. Name servers. IP address: Structure and characteristics. Subnets.

4.2 Internet/intranet security (I): authentication and confidentiality. Services and secure access methods. Encryption and digital signatures.

4.3 Internet/intranet security (II): Protected and unprotected areas. Vulnerabilities. Firewalls. Security audits. Tools and procedures for continuity in the service of web pages, email and FTP. Multi-Factor Authentication (MFA).



4.4 Virtual private networks: concept, typology and characteristics. Internet access to the corporate network. Teleworking: advantages and disadvantages.

4.5 Administration of cloud services. Microsoft365 Administration. Azure Active Directory Administration. Microsoft Sharepoint Technologies. Administration hybrid environments.



ANNEX: RESPONSIBLE STATEMENT
(in accordance with Rule Four, section 7)

Mr/Ms _____ with DNI _____
and email for notification purposes _____, in relation to the selection
process called by the CNMV with reference _____.

DECLARES

That at the time the provision of services with the CNMV begins, he/she is not performing any other public or private activity that may require prior authorisation or recognition of compatibility in accordance with the regulations on incompatibilities that are applicable in accordance with the rules of the selection procedure, and that he/she is not in receipt of any retirement or other pension in recompense for public service or under any public and mandatory Social Security system.

In _____ on _____ 202_

Signed: