



CONCLUSIONS REPORT

Of the Open Market
Consultation (OMC):

AUTOMATION OF THE PROCESSING OF MUNICIPAL URBAN INTERVENTION MEANS

MAY 2024

Información de Firmantes del Documento



MADRID

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ÍNDICE

1. INTRODUCTION.....	3
2. OMC LEGAL FRAMEWORK.....	4
3. OBJECT.....	5
4. METHODOLOGY.....	6
5. ACTIONS PERFORMED.....	6
6. PARTICIPATION.....	9
6.1 Call for interviews int the OMC framework.....	11
7. ANALYSIS OF PROPOSALS.....	12
7.1 Participation details.....	12
7.2 Overall conclusions.....	12
7.3 Technical conclusions.....	13
ANNEX I: DESCRIPTION OF THE DESIRED WORK PROCESS.....	18
ANNEX II. PARTICIPATION FORM.....	25
ANNEX III. MINUTES OF THE INTERVIEWS.....	29
A. MEETING MINUTES - ESRI.....	29
B. MEETING MINUTES QUANTIA INGENIERÍA Y CONSULTORÍA, S.L.....	30
C. MEETING MINUTES - TECNALIA.....	31
D. MEETING MINUTES - NTT DATA-INGECID.....	32
E. MEETING MINUTES - CYPE.....	33
F. MEETING MINUTES - SGS-BABEL.....	34



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1. INTRODUCTION

Law 9/2017, of November 8, on Public Sector Contracts, by which the Directives of the European Parliament and the Council 2014/23/EU and 2014/24/EU, of February 26, are transposed into the Spanish legal system, of 2014 establishes in its article 115 that contracting operators may carry out market studies and direct consultations to the economic operators that were active in it in order to correctly prepare the tender and inform the aforementioned economic operators about their plans and of the requirements that will be required to attend the procedure.

Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement (hereinafter the Directive) repealing Directive 2004/18/EC, highlights the key role played by public procurement in the Europe 2020 Strategy, as an instrument that must be used to achieve smart, sustainable and inclusive growth, while guaranteeing a more efficient use of public funds.

The aforementioned Directive formally includes in its article 40 for the first time Open Market Consultations, empowering contracting authorities to carry out consultations before starting a contracting procedure, with the aim of preparing the contract and informing economic operators about their plans and procurement requirements, provided that such advice does not have the effect of distorting competition and does not result in a violation of the principles of non-discrimination and transparency.

The European Commission Communication (2021) 4320 recognizes that “innovation procurement requires good preparation by the public buyer”, with the aim of acquiring better

knowledge of the market. It is necessary to know if there are suitable innovative solutions or others that can be adapted or combined to face a challenge.

The Madrid City Council has made a clear commitment to the Public Purchase of Innovation, which constitutes one of the flagships in the Open Innovation Strategy, which is promoted by the General Directorate of Innovation and extends its support to all areas of government for the identification of challenges that can be covered with innovative solutions.

In the context of these actions, the relevant need was detected by the Urban Planning, Environment and Mobility Area, to implement a solution for automating the processing of municipal urban planning intervention means, that is, building permits. The Area has, together with other municipal administrative units, the power to process and resolve applications for urban planning licenses, first occupation and operating licenses, as well as verify, control and verify responsible declarations. It is also responsible for the direction, coordination and promotion of the definition and development of urban information systems and municipal cartography.

The Building Information Modelling (BIM) methodology is imposed as the most appropriate for solving the proposed challenge. Directive 2014/24/EU of the European Parliament already urged member countries of the European Union to modernize public bidding and contracting rules, using new technologies in order to improve and streamline processes, and Law 9/2017 ,



of November 8, on Public Sector Contracts, **promotes the processing of public procurement procedures by electronic means**, as well as the use of specific electronic tools, such as digital construction information Modelling (BIM) tools or similar tools in public works contracts, works concessions, services and project competitions, and in mixed contracts.

In Spain, RD 1515/2018, of December 28, gave rise to the creation of **the Inter-ministerial Commission for the incorporation of the BIM methodology in public procurement**. One of the objectives of this Commission is to promote the use of BIM in the professional and educational fields, as well as to position Spain as a global reference in the use of this methodology, and has promoted, together with the Ministry of Transport, Mobility and Urban Agenda, the **Plan BIM in public procurement**, approved by the Council of Ministers in June 2023. In addition to the aforementioned regulation, there are others that support the project and guarantee its high impact, highlighting **Law 9/2022, of June 14, on Quality of Architecture , which promotes the use of digital tools and computer systems** that promote excellence and sustainability of works. This law urges promoters to exercise exemplary leadership, promoting research, development and innovation (R&D&I) in their projects and works, as well as promoting digitalization and the use of innovative tools to make more efficient, competitive, safe and quality construction process. These tools will facilitate the drafting of projects, construction management and direction of the execution of the work, the use and maintenance of architecture. Among other measures, the use of specific electronic tools, such as digital construction information modelling (BIM) or similar methodologies, and the incorporation

of innovative techniques will be encouraged in public sector projects.

The use of the BIM methodology, together with the parameterization of the architectural and urban elements, makes it possible to largely optimize the administrative procedures related to the building process. Hence, the Government **Area of Urban Planning, Environment and Mobility and the autonomous IT body of the Madrid City Council** are working on the **formulation of a BIM Strategy**, whose actions include the incorporation of technological resources for the automation of processes that allow early validation of regulatory compliance of requests for urban intervention means, in order to improve the efficiency of municipal action. This strategy forms part of the Open Market Consultation (hereinafter OMC), which is detailed in this report.

2. OMC LEGAL FRAMEWORK

The Open Market Consultation is regulated in accordance with the provisions of article 115 of Law 9/2017, of November 8, on Public Sector Contracts:

1. The contracting bodies may carry out market studies and direct consultations to the economic operators that are active in the market in order to correctly prepare the tender and inform the aforementioned economic operators about their plans and the requirements that will be required to attend the procedure. To this end, the contracting bodies may use the advice of third parties, who may be experts or independent authorities, professional associations, or even, exceptionally, economic operators active in the market. Before starting the consultation, the contracting body will publish in the contracting profile located in the Public Sector Con-





tracting Platform or equivalent information service at the regional level, the purpose of the consultation, when it will begin and the names of the consultation. the third parties who are going to participate in the consultation, so that all possible interested parties can have access and the possibility of making contributions. Likewise, the reasons that motivate the choice of the external advisors that are selected will be published in the contractor's profile.

2. The advice referred to in the previous section will be used by the contracting body to plan the bidding procedure and, also, during its execution, as long as this does not have the effect of distorting competition or violating the principles of non-discrimination and transparency.

The consultations carried out cannot result in a contractual object so concrete and delimited that it only adjusts to the technical characteristics of one of the consulted parties. The result of the studies and consultations must, where appropriate, be specified in the introduction of generic characteristics, general requirements or abstract formulas that ensure better satisfaction of public interests, without, in any case, consultations being able to carried out entail advantages with respect to the award of the contract for the companies participating in those.

3. When the contracting body has carried out the consultations referred to in this article, it will record the actions carried out in a report. The report will list the studies carried out and their authors, the entities consulted, the questions that have been asked and the responses to them. This report will be motivated, will form part of the contracting file, and will be subject to the same publicity obligations as the specifications, being published in any case in

the profile of the contractor of the contracting body.

In no case during the consultation process referred to in this article may the contracting body reveal to its participants the solutions proposed by the other participants, these being only known in their entirety by the latter.

In general, the contracting body when preparing the specifications must take into account the results of the consultations carried out; If not, the reasons must be recorded in the report referred to in the previous paragraph.

Participation in the consultation does not prevent subsequent intervention in the contracting procedure that is processed, if applicable.

By virtue of the above, on December 11, 2023, the OMC was published on the National Procurement Platform, under reference 511/2023/04638 and title title "Automation processing of intervention media urban planning". On December 12, 2023, the associated documents were published on the Electronic Platform of Madrid City Council, at the following link:

[Consulta preliminar del mercado 'Automatización tramitación medios intervención urbanística' - SEDE ELECTRÓNICA \(madrid.es\)](#)

3. OBJECT

The purpose of this OMC has been:

1) **Obtaining information** to be able to define the technical and administrative requirements of the subsequent contracting file, provided that it does not have the effect of distorting competition and does not result in a violation of the principles of non-discrimination and transparency.





2) Informing economic operators

about the plans of the Madrid City Council and the requirements they will require to participate in the bidding procedure or procedures.

The content of the proposals will be used exclusively to define the requirements of a possible contracting procedure or any other necessary administrative procedure.

The purpose of the OMC is contemplated in the "Rules of the call" published on December 12, 2023 in the Electronic Platform of the Madrid City Council. In addition, a detailed description of the challenge posed in Annex I was provided.

Additionally, the following files were published:

- Participation form.
- Presentations planned at the presentation day and technical workshop.
- Essential requirements document and urban feasibility report.
- Example of essential requirements check report.
- Technology Watch Report.
- Frequently asked questions about the consultation.

4. METHODOLOGY

The call for participation was open and addressed to natural or legal persons, public or private, with knowledge of the challenges posed by the Urban Planning, Environment and Mobility Area of the Madrid City Council.

The participants adhered to the rules of the resolution, sending their proposals through the Electronic Platform of the Madrid City Council.

Throughout the OMC process, the **principles of transparency, equal treatment and non-discrimination or distortion of competition** were applied, proof of which is the publication of the conclusions through this report, the resolution of issues and consultations through the Electronic Platform of the Madrid City Council, as well as the publication of documents and videos generated throughout the process, such as those from the OMC presentation day.

The publication of this report of conclusions responds to what is stated in article 115.3 of Law 9/2017, of November 8, on Public Sector Contracts¹.

5. ACTIONS PERFORMED

For the OMC process, the Science & Innovation Link Office (SILO) has been advised in the process due to its knowledge and experience in OMC procedures and Public Procurement of Innovation, as enabled by article 115.1 of Law 9/ 2017, of November 8, of Public Sector Contracts:

"...the contracting bodies may use the advice of third parties, who may be experts or independent authorities, professional associations, or even, exceptionally, economic operators active in the market".

DOCUMENTATION OFFICIAL PUBLICATION

The documentation relating to the OMC was published and disseminated, in order not to distort competition, in the Madrid City Council Electronic Platform, at the following link:

[Consulta preliminar del mercado 'Automatización tramitación medios intervención urbanística' - SEDE ELECTRÓNICA \(madrid.es\)](https://www.madrid.es/consultas/consultas-preliminarias/consultas-preliminarias-automatizacion-tramitacion-medios-intervencion-urbanistica)

¹ See section 2, page 5, on OMC Legal Framework.



This publication has been made so that all possible interested parties can have access and make contributions, in compliance with the provisions of article 115.1 of Law 9/2017, of November 8, on Public Sector Contracts².

COMMUNICATION CAMPAIGN

A communication campaign was designed with the objective of informing the greatest number of possible agents in the innovation ecosystem.

For this, the Madrid Innovation channels have been used, mainly composed of the madridinnovation.es platform and social networks: LinkedIn, X, Instagram and Tiktok. Below are some examples of posts made:



PRESENTATION EVENT

With the aim of giving visibility and dissemination to the OMC process for Automation of the Processing of the Municipal Urban Intervention Means, on December 12, 2023, from 4:00 p.m. to 5:30 p.m., the **market presentation day of the project** took place, in which the challenge to be solved was described. Additionally, the procedure for participation in the OMC was presented.

The presentation event was held in person, at the International Lab, an innovation center located at Calle Bailén 41, in Madrid, with the agenda below.

The streaming was carried out through the Madrid Innovation YouTube Channel at the following address:

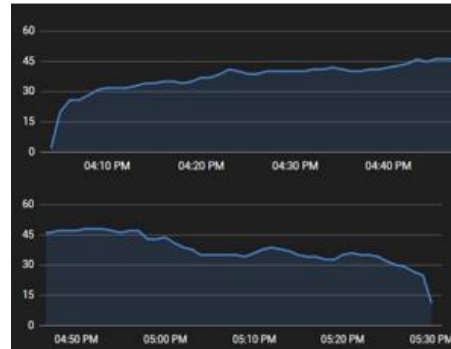
<https://www.youtube.com/watch?v=rtEMuBxuzR0&t=1079s>

There were 52 registrations for the event and a total of 22 in-person attendees and 106 online, with a record of 48 simultaneous views.

² See section 2, page 5, on OMC Legal Framework.



Therefore, attendance has been recorded in excess of registration, derived mainly from the dissemination through social networks of the link to the broadcast of the event, which achieved 289 views, and 106 unique users with an average viewing time of more than 30 minutes.



TECHNICAL WORKSHOP AND QUESTION RESOLUTION

In order to resolve any doubts that may arise from the published documentation and the information offered at the launch event, interested entities were again invited to attend a technical workshop a week later, on December 19, It was held on this occasion at the Madrid Innovation Lab (MIL), at 39 Bravo Murillo Street, in Madrid, with the following agenda.

SILO

Jornada de presentación

Consulta Preliminar al Mercado del proyecto de Compra Pública de Innovación

"AUTOMATIZACIÓN DE LA TRAMITACIÓN DE LOS MEDIOS DE INTERVENCIÓN URBANÍSTICA MUNICIPAL"

Información e inscripciones en: [www.madrid.es](#)

Fecha: 12 de diciembre
Hora: 16:00-18:00
Lugar: ILab (C/Bailén, 4)

Programa

- 16:00 - 16:15 Apertura institucional
- Angel Niño | Concejal de Innovación, Ayuntamiento de Madrid
- Borja Carabante | Concejal de Urbanismo, Medio Ambiente y Movilidad
- 16:15 - 16:30 Presentación de la iniciativa de CPI: Cómo participar en la Consulta Preliminar al Mercado.
- Estefanía Morales Quintero | Subdirectora General de Innovación, Ayuntamiento de Madrid
- 16:30- 17:00 Descripción del reto: AUTOMATIZACIÓN DE LA TRAMITACIÓN DE LOS MEDIOS DE INTERVENCIÓN URBANÍSTICA MUNICIPAL
- Juan Carlos Álvarez | Director General
- Marta Parro | Jefa de Departamento de Coordinación e Innovación en Licencias
- Rebeca Herrera | Adjunta al Departamento de Coordinación e Innovación en Licencias
- Área de Urbanismo, Medio Ambiente y Movilidad, Ayuntamiento de Madrid
- 17:00- 17:20 Dudas y preguntas
- 17:20 - 18:00 Café networking

Agenda - Madrid Innovate



The evolution of attendance can be seen in the following graph.

SILO

Taller Técnico

Consulta Preliminar al Mercado del proyecto de Compra Pública de Innovación

"AUTOMATIZACIÓN DE LA TRAMITACIÓN DE LOS MEDIOS DE INTERVENCIÓN URBANÍSTICA MUNICIPAL"

Fecha: 19 de diciembre
Modalidad: Presencial
Hora: 16:00-18:00
Lugar: MIL (C/Bravo Murillo 37-39) Madrid

Programa

- 16:00 - 16:15 Recepción de asistentes y bienvenida
- 16:15 - 16:35 Presentación del proyecto de CPI: "Automatización de la tramitación de los medios de intervención urbanística municipal."
- 16:35- 16:45 Presentación breve del procedimiento de Consulta Preliminar al Mercado
- 16:45- 17:45 Planteamiento y resolución de dudas de carácter técnico
- 17:45- 17:55 Planteamiento y resolución de dudas sobre el procedimiento
- 17:55- 18:00 Cierre y despedida





On this day, the technical challenge of the project was detailed and time was kept for the attendees to resolve doubts, some of which were asked during the launch event and others were raised at the workshop time by the attendees.



21 people from 13 different entities registered for the technical workshop, with almost all of those registered finally attending.

During the workshop, the doubts and questions were collected, with their corresponding answers, to be disseminated through the official channels provided, that is, in the electronic Platform. Furthermore, during the OMC process, **doubts and queries** have continued to be received from some of the economic operators participating in the process, which after being resolved by the project's technical team have been published in the **Electronic Platform of the Madrid City Council**.

[Preguntas frecuentes sobre la consulta preliminar al mercado denominada "Automatización Tramitación Medios de Intervención Urbanística" - SEDE ELECTRÓNICA \(madrid.es\)](https://www.madrid.es/urbanismo/consultas/preliminar_al_mercado_denominada_Automatización_Tramitación_Medios_de_Intervención_Urbanística_SEDE_ELECTRÓNICA)

CONSULTATION DEADLINE

February 9, 2024 at 11:59 p.m. (peninsular time) was the deadline for receiving OMC proposals for the project "Automation of the Processing of Municipal Urban Intervention Means",



without registering any type of incident in the process of participation.

The technical team compiled and analyzed the proposals received and contacted several proposing entities via email to, through an interview, request the completion/clarification of certain key sections of the participation form.

The methodology for selecting the entities to interview consisted of two steps:

- i) Identification of relevant and complete proposals.
- ii) Consideration of the existence of specific doubts to be resolved in the proposals.

Companies that met the two aforementioned characteristics are invited to the interview phase, with the aim of presenting the solution proposal and, therefore, gathering additional information.

This report includes, in section 6 PARTICIPATION and section 7 ANALYSIS OF PROPOSALS, a table with the list of proposals received, as well as a list of the entities with which the aforementioned meetings were held.

6. PARTICIPATION

The companies that have participated in the OMC by sending proposals for innovative solutions are indicated below, with the objective of offering them greater visibility and also to facilitate the contact between entities interested in establishing collaborative relationships with others that could effectively complement their capabilities in order to offer a complete solution to the challenge posed.

Within the period granted for the presentation of proposals, indicated in the participation bases, 9 forms have

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been received, of which 3 were presented by consortia, 5 by individual entities, and 1 by a natural person, as a self-employed person. In summary, there has been the participation of 18 entities and 1 individual, in 9 proposals.

P.	NAME OF PARTICIPANT ENTITIES
1.	1. Pablo Vicente Lagazpi
2.	2. SIGNE
	3. ITeC - FUNDACIÓN PRIVADA INSTITUT DE TECNOLOGIA DE LA CONSTRUCCIÓ DE CATALUNYA
	4. URBANISMO VISUAL S.L.
	5. ARCHIBUS SOLUTION CENTER SPAIN S.A.
	6. NOVALTRA SOFTWARE S.L.
	7. ECOLINNO - ECOLOGÍA E INNOVACIÓN LABORATORIO DEL PAISAJE S.L.
	8. INFORMÁTICA BORSAN S.L.,
	9. JERÓNIMO ALONSO MARTÍN
	10. COLEGIO OFICIAL DE APAREJADORES Y ARQUITECTOS TÉCNICOS DE MADRID
	3.
4.	12. SERIMAG MEDIA, S.L.
5.	13. CYPE
6.	14. TECNALIA
7.	15. QUANTIA INGENIERÍA Y CONSULTORÍA S.L.
8.	16. NTT DATA
9.	17. INGECID
	18. SGS TECNOS
	19. BABEL SISTEMAS DE INFORMACIÓN

To establish the geographical distribution, the Platform of each entity have been taken into account, and in the case of multiple Platform, the central one has been considered. **The analysis shows a greater concentration of participants from Madrid, although entities in the Barcelona area have also been active.**

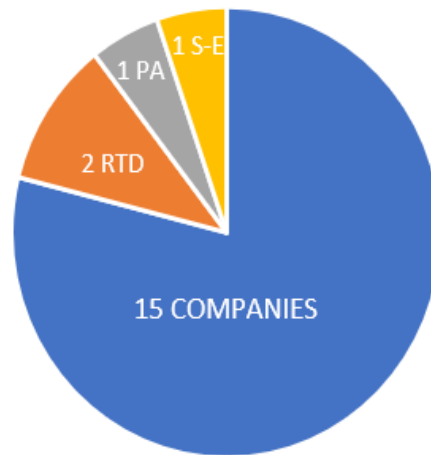
In the following map you can see the location of all participating entities.

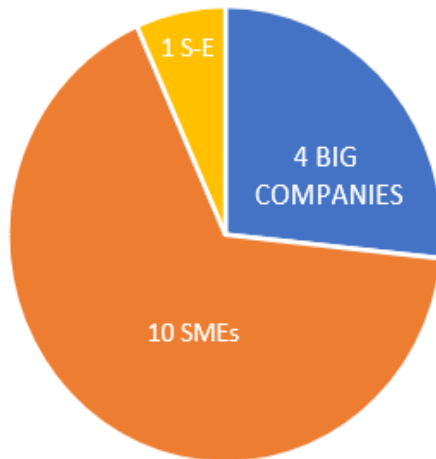


Regarding the type of entity, it must be said that, although companies predominate, the participation of two technology centres, an official professional association and a self-employed person, has also been registered.

By size, small entities have predominated, although large ones have also been represented in the response to the consultation.

The following charts illustrate the result of the participation analysis.





All participating entities, shown in the following table, are dedicated to the design and development of software, either focusing on research and innovation or on the creation and commercialization of specific solutions aimed at covering specific needs identified in the market, both public and private.

6.1 Call for interviews int the OMC framework

The main objective of the interview phase has been to obtain a clear vision of each and every one of the functionalities that the sought solution must integrate, for which it was necessary to enter into the aspects detailed below:

- State of the art
- Technological maturity and existence of open standards
- Innovation
- Open approach
- Collaborative approach
- Support in the process
- Costs
- Key phases
- Minimum Viable Product
- Scalability
- Building life cycle
- Digital twin

- Efficiency
- Update and evolution
- Support for external users
- Business model
- Social and economic impact
- Intellectual Property Rights
- Barriers
- Change management
- Use of Artificial Intelligence
- Training for internal and external users

After analyzing the content of the nine proposals received, the project's technical team identified the need to conduct a series of interviews with the participants of the proposals in which the following circumstances were present:

- The proposal was relevant and complete.
- There were some specific doubts to be resolved.

Taking these criteria into account, six interviews were carried out in which the following eight entities participated:

INTERVIEWED ENTITIES
1. ESRI ESPAÑA SOLUCIONES GEOESPACIALES, S.L.
2. CYPE
3. TECNALIA
4. QUANTIA INGENIERÍA Y CONSULTORÍA S.L.
5. NTT DATA
6. INGENICID
7. SGS TECNOS
8. BABEL SISTEMAS DE INFORMACIÓN

All interviews held have been configured and held under the same methodological framework. The call for each of the interviews was accompanied by the sending of a list of questions arising from the analysis of the proposals, so that the interviewed entities could prepare their answers prior to the meeting.





The script followed in all cases has been the following:

- Brief introduction to attendees about how the interview works by the Science & Innovation Link Office (SILO).
- Presentation of the proposal by the entity.
- Questions about the proposal from the Madrid City Council and SILO team.
- Completion of the interview.

During one of the interviews, some aspects were identified for which additional information was required, which the entity involved was able to prepare and send before April 5, at which time the interview phase was considered closed and work began for the preparation of the Final Report of Conclusions, thus facing the final phase of the Open Market Consultation process for the License Automation challenge.

7. ANALYSIS OF PROPOSALS

7.1 Participation details

In total, 9 proposals for solutions were received in the OMC of the project "Automation of the processing of municipal urban intervention means" and a total of **6 interviews were carried out in which 8 entities participated.**

The following points are worth highlighting:

- Given the great scope of the project challenge and the deadline given for its response, it is worth highlighting the broad response and interest shown by the market in providing solutions.
- Participation has included private market agents of all ranks, both large multinationals and medium and small companies, as well as two technology centres, a professional

association and a self-employed person.

For the specific case presented here, it is considered that, without a doubt, the proposals made by the economic operators who wish to participate in the future tender will provide solutions to the needs of the Urban Planning, Environment and Mobility Area of the Madrid City Council and the IAM.

7.2 Overall conclusions

In the analysis of the proposed solutions, the following technical aspects have been taken into consideration:

- Detailed technical description of the operation of the proposed solution.
- Degree of technological maturity.
- Elements of innovation.
- Technical scope.
- Budget.
- Deadline for execution of the proposal.
- Technological risks.
- Viability of the proposal.
- Strengths and weaknesses.

In procedural terms, the information management process for OMC procedures runned appropriately. There have been no incidents, and at all times the General Directorate of Innovation of the Madrid City Council has ensured the availability of the forms, documents and presentations in the Electronic Platform of the Madrid City Council.

The OMC sought to compile possible solutions and recommendations from participating companies related to the ambitious challenge that the Madrid City Council wishes to face. To do this, a form was structured considering different areas corresponding to the operation of the solution, the infrastructure necessary for its operation, the provision of the service and the business model for the





commercialization of the project results.

All proponents agree on the positive economic and social impact that the implementation of the solution will generate. Some proposals have presented a complete solution that integrates all the established requirements, although others have addressed a part of them, considering their solution as a part of the future complete solution. Almost all of them have been considered of maximum interest and pertinence, providing a complementary approach that adds great value to the OMC process.

It has been observed that the vast **majority of solutions have a high level of technological maturity if the elements of which they consist of are taken into account separately.** However, its integration into a city solution, capable of facing all the challenges that exist for its correct integration into the information systems of the Madrid City Council, the integration of urban planning regulations, its translation into the parameters, has never been carried out. necessary and finally the appropriate management of change both internally and externally.

In general, there is quite a disparity in the economic offers, which vary depending on the integrative nature of the proposal, as well as its scope.

Clarifications and conclusions have been extracted from the proposals and interviews that will allow for a better definition of the needs required in the future bidding documents.

For this reason, it is considered appropriate and necessary to initiate the appropriate contracting processes.

The information obtained from the different phases of analysis of the

proposals presented in this OMC will be considered by the contracting body in the preparation of the future bidding documents.

7.3 Technical conclusions

From a technical point of view, the OMC process has made it possible to cover the main objective of collecting information necessary for the public procurement of a solution for license automation. Additionally, two other secondary objectives were raised that have also been adequately covered:

1. Identify technical and functional requirements that both the equipment and the rest of the infrastructure elements must meet to adequately integrate with the systems and technologies identified in accordance with the desired work process.
2. Identify those aspects of OMC that could only be covered through the development and implementation of innovative solutions, because solutions with a sufficient degree of maturity are not found in the market.

According to the analysis carried out, from the forms and documents shared by the participating operators and the interviews held, the following technical conclusions have been obtained:

1. **STATE OF THE ART.** The analysis of the response to the consultation supports the conclusions of the technology surveillance study prior to the launch of the OMC process. There is no complete solution implemented in a city, although significant steps have been taken, the challenge remains open. Although there are tools on the market capable of addressing the challenge in its different parts, a comprehensive development capable of covering the need in all its breadth has not been identified,



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which not only includes the technological aspect but also the social and economic one.

2. **TECHNOLOGICAL MATURITY.** Given that the project is developed mainly in the field of Information and Communication Technologies (ICT), the definition of technological maturity usually applicable to software projects has been assessed. Taking this into account, it is considered that the **proposals are at an advanced level of global technological maturity, at TRL 7-8.** Under TRL7, the technology is ready for demonstration and testing with operating hardware and software systems, while developments in TRL8 already have their functionalities simulated and tested in real scenarios. There are various pilot projects that have advanced along this path, although the regulatory adaptation necessary in Madrid is very different from that of previous pilot projects and it is therefore not possible to consider that the testing scenario is similar.

The requirements identified in the OMC fit well with the market offering. No functional blocks offered by the market that have not been identified are detected, although functionalities are proposed by the market that had not been specified a priori in the challenge.

Under these premises, the appropriate instrument is the Public Purchase of Innovative Technology or CPTI (acronym in Spanish) . This consists of the public purchasing process of a good, work or service that exists at the time of the tender as a **prototype**, that requires the **development of new or improved technology**, or that does **not exist**,

but can be developed in a reasonable period of time.

To carry out the CPTI, any type of contracting procedure of the LCSP can be used, as long as it is subject to, 159 (simplified open procedure) 160-165 (restricted procedure), 167 (bidding procedures with negotiation) of the LCSP. The Innovation Partnership procedure can also be used (arts. 177 et seq. LCSP).

3. **INNOVATION.** The elements of the project with the most relevant innovative content are related to the integration of the BIM and GIS disciplines, as well as technologies for data extraction through artificial intelligence applied to the analysis of natural language included in the rules and regulations of which derives the need to comply with certain parameters to be interpreted and translated into the language that the solution to be developed can understand and process.
4. **OPEN APPROACH.** The solution to be implemented for license automation must be open source, contributing through BIM to improve the accessibility, usability, management and sustainability of digital data in construction. Processes should be defined as shared project information that supports seamless collaboration for all participants in a project or initiative. This is intended to facilitate interoperability to benefit projects and assets throughout their life cycle. Key concepts in this sense are interoperability, open and neutral standards, which facilitate interoperability, and open and agile data formats, which improve collaborative workflows. The ultimate goal is sustainability, which





will be safeguarded by long-term interoperable data standards.

For the development of the project, the BIM standards must be considered: IFC (Industry Foundation Classes), IDM (Information Delivery Manual), BCF (BIM Collaboration Format) and IDS (Information Delivery Specifications).

5. **COLLABORATIVE APPROACH.**

Different potential suppliers have proposed covering a set of the functional blocks identified in the OMC in a comprehensive manner, while others have addressed only parts of the challenge. The bidding process will allow for promoting contact and rapprochement between entities with complementary capabilities, including activities aimed at change management that are part of the project.

6. **SUPPORT IN THE PROCESS.**

Given the technical complexity of the project, the need to introduce in the scope of the future specifications a Transformation Office that, among other functions, develops a process consultancy together with the Madrid City Council to facilitate the implementation of the new processes and ensure that the technological solution acquired in the tender is configured and integrated appropriately to serve said processes.

7. **COSTS.**

Having detailed information regarding the possible costs of the proposed solutions is essential, which is why it is possible that there will be new rounds of dialogue with the operators that have participated in the OMC. Both the cost of acquiring licenses necessary for the implementation of the solution, as well as the cost of the activities

designed for the successful implementation of the solution, which may have dynamization, training and dissemination components, must be considered comprehensively.

8. **KEY PHASES.**

The proposals by the participating entities generally consider the need to address five phases in the development of the project: (1) The incorporation of the applicable standards and regulations and generation of parameters and requirements, (2) Support for the promoters to the generation of the BIM model and introduction into the system by a promoter, with the support and guidance of the developed solution (self-assessment and cleaning process), (3) Granting/denial of license based on the evaluation of compliance with requirements, (4) Update of the BIM model after construction for the declaration of first occupancy, and depending on other circumstances (remodelling, events, etc.) and (5) Update of parameters that affect the validation and therefore the granting of licenses.

9. **MINIMUM VIABLE PRODUCT.**

The project must consider the creation of an MVP (Minimum Viable Product), which includes the incorporation and validation of a reduced number of parameters of the BIM model, which can be tested in use and expanded in terms of parameters and functionalities, so that At the end of the project the MVP has become a complete solution.

10. **SCALABILITY.**

The solution to be implemented must be scalable from the broadest possible point of view: from an MVP concept to a complete





solution, from one developable area to a different one, and from one city to a different one.

11. **LIFE CYCLE.** The solution must incorporate the concept of the building's life cycle, in a way that allows dialogue with the city council in relation to all construction events of a building and its registration.
12. **DIGITAL TWIN.** The BIM-GIS integration generated within the framework of the solution must be compatible in all its aspects with the philosophy of the Digital Twin of the Madrid City Council as a virtual representation of the elements of the city, its infrastructure, its municipal services, its citizens and data associates.
13. **EFFICIENCY.** The solution must demonstrate its effectiveness, and this will be measured by appropriate indicators. The traceability of the solution will be carried out through a dashboard and a monitoring protocol capable of measuring the effectiveness of the service and the reliability of the tool.
14. **UPDATE AND EVOLUTION.** The implementation of a new system must consider the needs of service provision under normal operating conditions, including updating and maintenance. Considering these needs will guarantee the sustainability of the solution once it is launched. The requirement at the level of people involvement is especially relevant, so aspects related to change management and training must be considered.
15. **SUPPORT FOR EXTERNAL USERS.** As an essential part of managing the change towards a new way of working, the new solution must include a friendly, simple and robust

external user interface, which facilitates its integration into the usual routines of promoters and users of the Madrid City Council.

The availability of manuals, and the organization and delivery of external and internal webinars and training courses, will be considered part of the solution implementation work.

16. **BUSINESS MODEL.** It must be considered that the future commercialization of the solution must be carried out under a mixed business model by which the solution will be implemented and the provision of update, maintenance and, where appropriate, evolution of the solution services will be carried out. After the end of the implementation contract, the update and maintenance must be assumed by another entity with the appropriate capabilities.
17. **SOCIAL AND ECONOMIC IMPACT.** An essential requirement is the achievement of the greatest positive impact from a social and economic point of view. The proposals must justify these impacts derived from (1) the contribution to the digital transformation of companies and public institutions, (2) the achievement of a digital twin useful in control, evaluation, and prediction tasks, (3) the improvement of digital capabilities of people inside and outside the institution, and (4) saving time in license management, among other relevant aspects. The contribution to the generation of quality employment and ultimately the improvement of efficiency in terms of cost and results will be valued..
18. **INDUSTRIAL PROPERTY RIGHTS.** Since the solution will require the



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integration of different systems already developed, the pre-existence of intellectual property rights belonging to the entities involved will be considered. However, it will be necessary to establish agreements regarding the ownership of the rights to the new knowledge generated, its protection and its exploitation.

19. **BARRIERS.** Solutions aimed at the challenge of updating licenses must anticipate some barriers that could have a relevant impact on their potential exploitation beyond the first implementation. A first barrier will be the existence of very different legislation and processing processes depending on countries and cities, which may limit the adaptability of the solution, and ultimately its exploitation.

The promoters' lack of adaptation to the knowledge to use BIM is also an element to consider and mitigate during the project. Error management in the first experiences must be planned to offer the necessary support so that the process does not stretch out over time, bottlenecks, and frustration in general on the part of users.

20. **CHANGE MANAGEMENT.** It is undoubtedly one of the main barriers to consider as the most common. Training and information both internally, at the City Council, and externally, is key to success in the initiative.



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ANNEX I: DESCRIPTION OF THE DESIRED WORK PROCESS

BACKGROUND

In the last decade, important modifications have been incorporated into the Spanish legal system that affect information management models related to urban planning and construction. Among them we can point out, in chronological order:

1. Law 39/2015, of October 1, on the Common Administrative Procedure of Public Administrations, and Law 40/2015, of October 1, on the Legal Regime of the Public Sector, with the objective of rationalizing the public sector ensuring the economy and efficiency of its management through, among other aspects, the imperative generalization of electronic procedures and actions.

2. Law 19/2013, of December 9, on transparency, access to public information and good governance and in the case of the Madrid City Council, Transparency Ordinance of the City of Madrid of July 27, 2016, which requires the municipal administration to actively publish all relevant information derived from its management as a guarantee of citizens' right to access information.

3. On February 26, 2014, Directive 2014/24/EU of the European Parliament was published, which urged member countries of the European Union to modernize public tendering and procurement rules, using new technologies in order to improve and streamline processes. Thus, through Law 9/2017, of November 8, on Public Sector Contracts, the processing of public procurement procedures by electronic means is promoted, as well as the use of specific electronic tools,

such as digital modelling tools of construction information (BIM) or similar tools in public works contracts, works concessions, services and project competitions, and in mixed contracts that combine elements thereof (Fifteenth additional provision).

4. Royal Decree 1515/2018, of December 28, which creates the Interministerial Commission for the incorporation of the BIM methodology in public procurement. One of the objectives of this Commission is to promote the use of BIM in the professional and teaching fields, as well as to position Spain as a global reference in the use of this methodology. The founding meeting of the aforementioned Commission took place in April 2019 and represents an opportunity for local entities to join the debate and exchange of good BIM practices, through the Territorial Coordination Committee.

5. Human Resources Management Transformation Strategy 2020-2023, approved on December 18, 2019. Third axis: "Digital transformation: Digitalization as an instrument of modernization and streamlining of management aims to improve processes and its implementation in a digital environment that will improve relations between administration and citizens."

6. Finally, the recent Law 9/2022, of June 14, on Quality of Architecture, encourages us to use digital tools and computer systems by including in its articles, specifically in article 5.2, the following mandate:

2. The public authorities will seek above all the excellence and sustainability of the works in which they act as promoters, in an exemplary manner for other sectors of society. They will promote research, development and innovation (R+D+i) in their projects and works and will promote digitalization





and the use of technologically innovative tools aimed at making the construction process more efficient, competitive, safe and quality. These tools will facilitate the drafting of projects, construction management and direction of the execution of the work, the use and maintenance of architecture. Among other measures, the use of specific electronic tools, such as digital construction information Modelling (BIM) or similar methodologies, and the incorporation of innovative techniques will be encouraged in public sector projects.

Several standards have been cited that contain reference to the BIM methodology. We will briefly explain what it consists of and what is the potential of information Modelling of construction projects BIM (Building Information Modelling).

This revolutionary design methodology is an extraordinary source of data for the management of a reality as complex as the city. Its integration with corporate geographic information systems and with the electronic processing of administrative files is undoubtedly a vector of transformation of the Public Administration.

The most important characteristics of the BIM methodology are to allow multidisciplinary and collaborative work, through a platform with the same tool, checking possible interferences before starting construction, integrating 2D and 3D, improving the vision of the global project and allowing the automatic generation of all project documentation (budgets, structural planning, etc.), with an evident improvement in productivity and time and cost savings.

The BIM methodology has a complex development for which construction companies and professionals must

prepare, but also Public Administrations - and other contracting authorities - that must tender works, projects or concessions that will have to be presented in BIM methodology, with obvious implications in the specifications of technical prescriptions, requirements and means for receiving offers, their examination and evaluation by the contracting tables.

This methodology involves working in a collaborative environment, centralizing all territorial and urban information in corporate resources. This, together with the parameterization of all architectural and urban elements, makes it possible to optimize a large part of the administrative procedures related to building and public works, achieving, among other benefits:

1. Increase the social reputation of Public Administrations by identifying with dynamic and innovative initiatives, positioning themselves as an engine of transformation.
2. Achieve the application of the principle of data uniqueness, for which the producer of the data is the only person responsible, which results in the integrity and legal security of the information handled in all subsequent processes.
3. Improve the efficiency of administrative processes by reducing time and consumption of human and material resources.
4. Raise the quality of architectural and public works projects: reliability in measurements and costs, time management and planning, reduction of modifications, maintenance of built work and inventory management.

As can be seen, current requirements, both social and legal, impose on local administrations other mechanisms to



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manage the urban cycle, which respond to the principles of effectiveness and efficiency, transparency and access to information and reuse by companies and citizens of the information generated by the Public Administration. There are three pieces that are considered essential for this new configuration:

1. Electronic urban planning platform to host urban planning determinations with permanent updating.
2. Electronic file processing system that incorporates structured graphical exchange files that can be integrated into the graphical platform.
3. Internet portal that allows access and download of the consolidated situation of urban planning and the files processed.

Madrid City Council is committed to innovation. To this end, administrative structures have been provided at the highest level that have been assigned the task of establishing, developing and executing policies to support innovation. In this framework, intra-entrepreneurship processes must be valued, strengthening the image of Madrid as a disruptive and creative city.

The Government Area of Urban Planning, Environment and Mobility has among its powers, together with other municipal administrative units, the processing and resolution of applications for urban planning licenses, first occupation and operating licenses, as well as verifying, controlling and checking the responsible statements. All of this in certain cases, by virtue of section 13, point 1.15 of the Agreement of the Government Board of the City of Madrid on the organization and powers of the Urban Planning, Environment and Mobility Government Area of June 29, 2023.

Likewise, according to the provisions of section 10, point 1.7 of the aforementioned Agreement, it is responsible for the direction, coordination and promotion of the definition and development of urban information systems and municipal cartography.

The use of the BIM methodology, together with the parameterization of the architectural and urban elements, makes it possible to largely optimize the administrative procedures related to the building process. Hence, the Government Area of Urban Planning, Environment and Mobility and the autonomous IT body of the Madrid City Council are working on the formulation of a BIM Strategy, whose actions include the incorporation of technological resources for the automation of processes that allow early validation of regulatory compliance of requests for urban intervention means, in order to improve the efficiency of municipal action.

STATE OF THE TECHNIQUE

With the above background, on June 9, 2020, the first AGREEMENT was signed BETWEEN THE URBAN DEVELOPMENT GOVERNMENT AREA OF THE MADRID CITY COUNCIL AND THE ASSOCIATION OF REAL ESTATE PROMOTERS OF MADRID (ASPRIMA) FOR THE EVALUATION OF COMPUTER TOOLS BASED ON BIM MODELS FOR THE VERIFICATION OF REGULATORY PARAMETERS.

Through the Agreement, ASPRIMA offered to collaborate with the AGDU by facilitating the transfer of the necessary licenses to use its computer program at no cost, providing configuration instructions for municipal equipment, training municipal staff in its use and providing support. necessary technician.



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On the other hand, the AGDU provided the technical and human resources necessary for the implementation and evaluation of the aforementioned computer program, promoting the training of its staff in the use of the tool and its application to the procedures for processing urban planning licenses.

Once the work on this first Agreement was completed, it became necessary to sign a new Agreement, which took place on October 14, 2022, by the same parties and a similar name, and with a duration of 6 months, with the possibility of extension.

The objectives of this second Agreement will allow for the development and deepening of those aspects that were subject to evaluation, and in which the improvements that would need to be made were identified, while at the same time their possible adaptation to the new regulatory framework, constituted by the new Ordinance, will be evaluated. 6/2022, of April 26, 2022, on Licenses and Responsible Urban Declarations of the Madrid City Council.

Throughout the development of the work, it has been possible to assess the benefits and advantages that computer tools based on BIM models would provide for the automated verification of regulatory parameters.

We believe that the state of the art is sufficiently mature to allow the development of computer tools adapted to the needs of municipal control of the means of urban intervention. However, these developments, with the breadth and specialization that their adaptation to administrative procedures requires, are not yet on the market.

UNMET NEEDS

This project is motivated by the need to identify in the market of technological operators, the possible computer tools based on BIM methodology that, after development and adaptation to the requirements of municipal administrative processing, could represent an advance in the automated validation of regulatory compliance of requests for means of urban intervention (licenses and responsible declarations).

OVERALL OBJECTIVE

The general objective of this initiative is part of the strategic project of the Area of Urban Planning, Environment and Mobility and the autonomous IT body of the Madrid City Council, for the digital transformation of the urban planning process of the city: from strategic planning, planning, management and equidistributional of benefits and burdens of urban planning action, the urbanization of land suitable for hosting uses, and the construction and final implementation of the same in the territory.

We intend to begin this complex challenge in the final phase of the urban planning process, with the search and adoption of innovative solutions in the field of building activity, through the automation of administrative controls related to compliance with objective and regulated urban planning parameters. The more these prior controls are automated, freeing the competent municipal services from routine checking and validation operations, the more the task is concentrated on issues with greater added value and intellectual complexity: those require a higher level of awareness and reflection for the appropriate decision-making, such as those related to building safety,



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the protection of historical-artistic heritage, effects on mobility or the environment.

Furthermore, the automated verification of the basic urban planning parameters introduces a multiplier factor of efficiency and agility also in the design phase, by allowing the technical designer to verify, in the architectural creation process itself, that his project complies with the urban planning regulations applicable in his area. requirements. essential, while developing other aspects of sector regulations.

This possibility of early validation of a building action, in a phase prior to the mandatory control and validation by the administration, will constitute the greatest advance in terms of streamlining, transparency and legal certainty that has occurred previously.

Thus, the main objective of the project is the development of a municipal application based on the use of BIM methodology that allows:

1. Optimization of time and public resources by reducing the time necessary to carry out checks of basic urban parameters.
2. Greater traceability of the process of reviewing compliance with the applicable urban planning regulations.
3. More transparent control process, eliminating discretionary factors associated with the interpretation of regulatory application.
4. Equally useful tool for the designer, which allows him to detect non-compliance in the project before presenting it to the Administration and to previously correct possible non-compliance when Modelling the project in 3D and having to verify the different regulatory requirements.

The project seeks, therefore, to promote innovative activity aimed at the incorporation of technological solutions that optimize the management of applications for enabling titles of an urban nature. The optimization of municipal intervention in this matter has a direct effect on citizens, reducing processing times, generating greater confidence in the agility of the administration, contributing to the transparency and legal security of the entire process, and resulting in facilitating the economic activity in the city of Madrid.

Finally, the Regional Research and Innovation Strategy (RIS3) also establishes the objective of encouraging and promoting public-private cooperation in the generation of new innovation programs. The implementation of this project aims to promote the revitalization of R&D&I activities in the private sector through the Public Purchase of Innovation for the generation of solutions for the main needs existing in the Public Administration.

SPECIFIC OBJECTIVES

The previous global objectives are specified in the following specific objectives:

- Provide the City Council with its own tool for validating urban planning parameters using BIM methodology.

After having participated in two agreements to evaluate the implementation of this methodology, it is proposed that the tool can be divided into two applications: one intended for the designer and the other for the municipal technician. In this way, the designer will work with the first application, either introducing the urban planning parameters in a structured and pre-established way, or



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incorporating files specifically created by the City Council for each territorial area, and doing a first automatic check. Subsequently, the municipal technician will be able to verify, with the second application, compliance with each of the urban planning parameters in an automated manner.

The applications must have an interface that makes it possible to incorporate the urban parameters to be validated or import them from a file.

Other options will be studied where a single application is used to carry out the regulatory analysis in the projects presented.

The files delivered to the Administration will be in open format (IFC).

- Improve the adjustment of building projects to the conditions of the territory, incorporating as a basic element the topography of the plot on which it is intended to act.
- Increase the quality and frequency of updating municipal cartography by including new building artifacts in a more agile manner.
- Obtain specific training for Madrid City Council workers on BIM methodology and mainly in the use of specific applications.
- Achieve greater work efficiency by reducing, thanks to the incorporation of these new tools, the processing time of urban planning licenses, starting with those that are of greater importance, those referring to new construction and replacement works.
- To meet these specific objectives, it is necessary to have the necessary support from BIM experts, for the preparation of the future contractual procedure in which the technical prescriptions for the acquisition and

development of the tool are defined; its implementation in the processing units; the technical support necessary to resolve incidents, improve and update the tool; and, finally, the estimate of the tender price of these services.

EXPECTED RESULTS

Results of direct impact on municipal public services:

- New technologies developed: The result of the project will be the development of an innovative system that allows the verification of urban parameters within the urban planning license procedure to be carried out in an automated way.
- Improve the efficiency of administrative processes by reducing time and consumption of human and material resources.
- Greater veracity in the review of compliance with regulations. More transparent process when it comes to carrying out regulatory checks.
- Greater ease of understanding the project by viewing it in 3D.
- Increase the knowledge of Madrid City Council staff, specifically the technical staff who report urban planning licenses, in BIM methodology.
- Achieve in the future to have digital twins of the city, which allow the management and visualization of information in a 3D environment, by expanding the municipal database as new urban areas are developed.

Results of indirect impact on the real estate sector and citizens:

- Increase in the social reputation of municipal administrations by identifying with dynamic and innovative initiatives, positioning themselves as an engine of transformation.



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- Achieve the application of the principle of data uniqueness, which results in the integrity and legal security of the information handled by all intervening agents and in all subsequent processes.
- Efficiently transmit complete project data, with hardly any losses or rework.
- Expedite the urban development of the city, favoring economic activity and access to housing.
- Equally useful tool for the designer that allows him to detect non-compliance in the project before presenting it to the Administration and to previously correct possible non-compliance by Modelling the project in 3D and having to verify the different points of the regulations.
- Raise the quality of architectural and public works projects that are submitted to the supervision of the municipal Administration: reliability in measurements and costs, time management and planning.

BOUNDARY CONDITIONS

The application of this new methodology will be implemented initially in the Government Area of Urban Planning, Environment and Mobility, where, among others, urban planning licenses for public domain land and new developments in the city are granted, for which is understood to be the optimal place to test the prototype of the computer application to be developed.

Currently, it has technical personnel who analyse and report on the projects presented by interested parties. The verification of the urban parameters is carried out in an analogue way, with the majority of the documents in PDF, not

being modifiable or manageable by the municipal technician.

Licenses are processed with an electronic file through the SIGSA-SLIM platform (Municipal License System) which makes communication with citizens completely electronic. However, the format of the documents presented has become outdated, since currently most architecture firms use BIM methodology tools. However, when delivering the projects to the City Council they do so in PDF format, losing quality and information in the projects, and wasting part of the work that has already been done by the studies and that can be very useful for the City Council.

Once the application has been fully developed and implemented in the Area of Urban Planning, Environment and Mobility, it will be implemented in the rest of the licensing processing bodies of the Madrid City Council, covering the licenses of the entire municipal area of Madrid.

PROJECT INDICATORS

PERFORMANCE

Indicators of relevance to the project are presented and that proponents will have to take into consideration for the articulation of innovative proposals:

- 1- Reduction in granting times for new plant licenses. Magnitude: business days
- 2- Cost savings in real estate developments derived from savings in licensing periods (financial costs, management expenses, etc.). Magnitude: euros/m² built
- 3- Reduction of delivery times for real estate developments. Magnitude: days



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ANNEX II. PARTICIPATION FORM

The participants have formulated their proposals by completing the form indicated in this section. In addition to this form, complementary documents have been added, without limiting their number.

The form has two parts

- **Additional information:** Contains questions related to the entity presenting the proposal, its experience in the development of R&D&I activities and the capabilities it presents in the technological field of the solution in demand.
- **Description of the solution proposal:** Contains questions related to the required functionalities, as set out in the challenge previously provided: technological maturity, deployment of the solution, regulation to be taken into account and management of intellectual and industrial property.
- **All sections of the participation form must be completed in their entirety for consideration and analysis.**

Los participantes han formulado sus propuestas mediante la cumplimentación del formulario indicado en el presente apartado. De forma complementaria a este formulario se han podido añadir documentos complementarios, sin haberse limitado su número.

El formulario dispone de dos partes

- **Información adicional:** Contiene cuestiones relativas a la entidad que presenta la propuesta, a su experiencia en el desarrollo de actividades de I+D+I y a las capacidades que presenta en el ámbito tecnológicos de la solución demanda.
- **Descripción de la propuesta de solución:** Contiene cuestiones relativas a las funcionalidades requeridas, tal y cómo se expone en el reto facilitado previamente: madurez tecnológica, despliegue de la solución, regulación a tener en cuenta y gestión de la propiedad intelectual e industrial.
- **Todos los apartados del formulario de participación deben ser cumplimentados en su totalidad para su consideración y análisis.**



Additional information		
Does your entity have billing for technologies similar to those of this solution proposal in the last 3 years?	YESÍ <input type="checkbox"/>	NOT <input type="checkbox"/>
If you answered YES to the previous question, tell us what the approximate billing was for technologies similar to those of this solution proposal in the last 3 years (grouped data from the 3 years).		
Do you consider that your entity has relevant certifications to undertake the work you propose?	YESÍ <input type="checkbox"/>	NOT <input type="checkbox"/>
If you answered YES to the previous question, indicate what those certifications are (max. 300 characters).		
Do you consider that your entity's personnel have relevant qualifications to undertake the work you propose?	YESÍ <input type="checkbox"/>	NOT <input type="checkbox"/>
If you answered YES to the previous question, indicate what those qualifications are (max. 300 characters).		
Have you invested in R&D in the last 3 years?	YESÍ <input type="checkbox"/>	NOT <input type="checkbox"/>
If you have answered YES to the previous question, indicate what the amount of said investment has been in the last 3 years (data grouped from the 3 years).		
Has your entity obtained competitive public financing for R&D projects in any of the last 3 years?	YESÍ <input type="checkbox"/>	NOT <input type="checkbox"/>
If you have answered YES to the previous question, indicate the volume of financing raised in the last 3 years (grouped data from the 3 years).		
Does your entity have experience in executing projects in the area of the proposed challenge or similar?	YESÍ <input type="checkbox"/>	NOT <input type="checkbox"/>
If you have answered YES to the previous question, indicate a brief summary of the experience (scope, client, execution period and brief description).		
For the challenge posed, provide detailed information in relation to research, development of solutions, publications, etc., carried out or being carried out whose purpose is similar to that indicated		

Description of the proposed solution	
Brief summary of the solution proposal: functional specification (maximum 1,250 characters) Description of the possible proposal that can satisfy the stated need, described from a functional approach.	
Estimated duration for the execution of the proposed solution (months) Please detail the duration of the solution, for example by phases.	
Estimated cost of developing your solution proposal (€) Please provide a breakdown of the budgeted scope (for example, by personnel, other components, etc.).	

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JUAN CARLOS ALVAREZ RODRIGUEZ - DIRECTOR GENERAL
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Is the proposed project in line with your business strategy? Explain in what line and how.	
What do you consider to be the main risks of the project?	
Indicate the technological capabilities available to you to carry out the proposed work.	
I+D+I	
Elements of innovation (new technologies delivered and innovative solutions) or expected R&D results. Specifically, say what the differentiating elements of your solution proposal are compared to the products and services that are already available on the market (max. 850 characters).	
What features of the project and proposed scope do you consider most important?	
What are the main advantages of the proposed solution over others? Indicate the differential values of the proposal.	
What criteria do you consider important to evaluate your solution proposal?	
Technological and non-technological needs that must be taken into account for the application of your solution proposal.	
Current maturity level in which your solution proposal is (if you know the technological maturity level (TRL*) in which it is located, indicate it).	
Identify integration phases with pre-existing technologies and services.	
Identify the testing and rehearsal phases (in real public service environments).	
Indicate validation phases, certification, standards, etc. to consider.	

Deployment	
Indicate regulations and regulations associated with the need raised.	
Do you consider that there is any specific limitation or barrier to the deployment of the solution in the market? Which one?	
Propiedad Intelectual	
Regarding Intellectual and Industrial Property Rights (IPR), a priori and due to the characteristics of your entity, does it have limitations to share the IPR with the contracting body or to establish a royalty on future sales of the proposed solution?	YES <input type="checkbox"/> NOT <input type="checkbox"/>
If you answered YES to the previous question, indicate what type? Or if they do not exist, what percentage do you consider could be shared with the contracting body? What percentage of the sale price could be established as a royalty?	



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Mandatory Declarations		
I authorize the General Directorate of Innovation to use the contents of the proposals, which will be limited exclusively to their possible inclusion in the specifications of a possible contracting procedure.	<input type="checkbox"/>	
The solution proposal presented is free of copyright or any other copyright or business right that prevents its free use by the General Directorate of Innovation or any other collaborating company in the development of future projects.	<input type="checkbox"/>	
Consent is expressly granted for the General Directorate of Innovation to keep the necessary information, total or partial, accessible and updated, on the proposals presented.	<input type="checkbox"/>	
List of attached documentation provided		
If there is one, indicate the documentation that accompanies your solution proposal and provides more information about it (maximum three files per proposal).		
Name of the file	Brief description	Confidential**
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

*TRL is an accepted way of measuring the degree of maturity of a technology. Therefore, if we consider a specific technology and have information on the TRL or level at which it is located, we can get an idea of its level of maturity.

**Check if the corresponding documentation is considered confidential



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ANNEX III. MINUTES OF THE INTERVIEWS

A. MEETING MINUTES - ESRI

DATE	18/03/2024		
PLACE	Calle Rivera del Sena, 21 (Edificio Apot. Sede de Urbanismo) 28042-Madrid		
TIME	9:00		
DURATION	1 hora		
OBJECTIVE	Interview organized to collect information related to the proposal made by ESRI, within the framework of this Open Market Consultation.		
ORGANISER	Mónica Antón, Senior Consultant of Business & Strategy Area at SILO Company		
ATTENDANTS	NOMBRE	ENTIDAD	Presencial/ Online
	Juan Carlos Álvarez	Ayuntamiento de Madrid	Presencial
	José María Boyano	Ayuntamiento de Madrid	Presencial
	José Miguel González	Ayuntamiento de Madrid	Presencial
	Rebeca Herrera	Ayuntamiento de Madrid	Presencial
	Jesús Cerezo	Ayuntamiento de Madrid	Presencial
	Marta Parro	Ayuntamiento de Madrid	Presencial
	Ana Reguero	Ayuntamiento de Madrid	Online
	Diana Aguilar	Ayuntamiento de Madrid	Presencial
	Álvaro Martín	ESRI	Presencial
	Adriana Rangel	ESRI	Presencial
	Silvia Casas	ESRI	Online
Mónica Antón	SILO	Presencial	
ATTACHED FILES	2024 03 Solución SUM para OMC Madrid_Esri.pdf* Respuesta a Cuestiones Entrevista_Propuesta_OMC_Madrid_esri.pdf*		

*Information received after the interview.



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B. MEETING MINUTES QUANTIA INGENIERÍA Y CONSULTORÍA, S.L.

DATE	18/03/2024		
PLACE	Calle Rivera del Sena, 21 (Edificio Apot. Sede de Urbanismo) 28042-Madrid		
TIME	10:30		
DURATION	1 hora		
OBJECTIVE	Interview organized to collect information related to the proposal made by QUANTIA, within the framework of this Open Market Consultation.		
ORGANISER	Mónica Antón, Senior Consultant of Business & Strategy Area at SILO Company		
ATTENDANTS	NOMBRE	ENTIDAD	Presencial/ Online
	Juan Carlos Álvarez	Ayuntamiento de Madrid	Presencial
	José María Boyano	Ayuntamiento de Madrid	Presencial
	José Miguel González	Ayuntamiento de Madrid	Presencial
	Rebeca Herrera	Ayuntamiento de Madrid	Presencial
	Jesús Cerezo	Ayuntamiento de Madrid	Presencial
	Marta Parro	Ayuntamiento de Madrid	Presencial
	Ana Reguero	Ayuntamiento de Madrid	Online
	Diana Aguilar	Ayuntamiento de Madrid	Presencial
	Pedro Quesada	QUANTIA	Presencial
	Santiago Domínguez	QUANTIA	Presencial
	Horacio Siciliano	QUANTIA	Presencial
	Fernando Valero	QUANTIA	Presencial
ATTACHED FILES	Mónica Antón	SILO	Presencial
	Plataforma de Validación de Licencias – Enfoque QuantIA Ingeniería y Consultoría.pdf		



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C. MEETING MINUTES - TECNALIA

DATE	22/03/2024
PLACE	Calle Rivera del Sena, 21 (Edificio Apot. Sede de Urbanismo) 28042-Madrid
TIME	9:00
DURATION	1 hour

OBJECTIVE	Interview organized to collect information related to the proposal made by TECNALIA, within the framework of this Open Market Consultation.		
ORGANISER	Mónica Antón, Senior Consultant of Business & Strategy Area at SILO Company		
ATTENDANTS	NOMBRE	ENTIDAD	Presencial/On-line
	Juan Carlos Álvarez	Ayuntamiento de Madrid	Presencial
	José Miguel González	Ayuntamiento de Madrid	Presencial
	Rebeca Herrera	Ayuntamiento de Madrid	Presencial
	Jesús Cerezo	Ayuntamiento de Madrid	Presencial
	Marta Parro	Ayuntamiento de Madrid	Presencial
	Ana Reguero	Ayuntamiento de Madrid	Online
	Diana Aguilar	Ayuntamiento de Madrid	Presencial
	Juan Corro	Ayuntamiento de Madrid	Online
	María Serena	Ayuntamiento de Madrid	Presencial
	Manuel Benito	TECNALIA	Presencial
	Mikel Quintana	TECNALIA	Presencial
	Alberto Silleras	TECNALIA	Presencial
ATTACHED FILES	Mónica Antón	SILO	Presencial



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D. MEETING MINUTES - NTT DATA-INGECID

DATE	22/03/2024
PLACE	Calle Rivera del Sena, 21 (Edificio Apot. Sede de Urbanismo) 28042-Madrid
TIME	10:30
DURATION	1 hour

OBJECTIVE	Interview organized to collect information related to the proposal made by NTT DATA, within the framework of this Open Market Consultation.		
ORGANISER	Mónica Antón, Senior Consultant of Business & Strategy Area at SILO Company		
ATTENDANTS	NOMBRE	ENTIDAD	Presencial/ Online
	Juan Corro	Ayuntamiento de Madrid	Presencial
	María Serena	Ayuntamiento de Madrid	Presencial
	Juan Carlos Álvarez	Ayuntamiento de Madrid	Presencial
	Diana Aguilar	Ayuntamiento de Madrid	Presencial
	Rebeca Herrera	Ayuntamiento de Madrid	Presencial
	José Miguel González	Ayuntamiento de Madrid	Presencial
	Jesús Cerezo	Ayuntamiento de Madrid	Presencial
	Marta Parro	Ayuntamiento de Madrid	Presencial
	Borja Rullán	NTT DATA	Online
	Jesús de Paz	INGECID	Online
	Paloma Sánchez Allegre	NTT DATA	Online
	Miguel Cuartas	INGECID	Online
ATTACHED FILES	Roberto Fernández Hergueta	NTT DATA	Online



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E. MEETING MINUTES - CYPE

DATE	22/03/2024
PLACE	Calle Rivera del Sena, 21 (Edificio Apot. Sede de Urbanismo) 28042-Madrid
TIME	12:00
DURATION	1 hour

OBJECTIVE	Interview organized to collect information related to the proposal made by CYPE, within the framework of this Open Market Consultation.		
ORGANISER	Mónica Antón, Senior Consultant of Business & Strategy Area at SILO Company		
ATTENDANTS	NOMBRE	ENTIDAD	Presencial/Online
	Juan Corro	Ayuntamiento de Madrid	Presencial
	María Serena	Ayuntamiento de Madrid	Presencial
	Juan Carlos Álvarez	Ayuntamiento de Madrid	Presencial
	Diana Aguilar	Ayuntamiento de Madrid	Presencial
	Rebeca Herrera	Ayuntamiento de Madrid	Presencial
	José Miguel González	Ayuntamiento de Madrid	Presencial
	Jesús Cerezo	Ayuntamiento de Madrid	Presencial
	Marta Parro	Ayuntamiento de Madrid	Presencial
	Ana Reguero	Ayuntamiento de Madrid	Online
	Pablo Gilabert	CYPE	Presencial
	Ane Ferreiro	CYPE	Presencial
	Mónica Antón	SILO	Presencial
ATTACHED FILES			



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F. MEETING MINUTES - SGS-BABEL

DATE	22/03/2024
PLACE	Calle Rivera del Sena, 21 (Edificio Apot. Sede de Urbanismo) 28042-Madrid
TIME	13:30
DURATION	1 hour

OBJECTIVE	Interview organized to collect information related to the proposal made by SGS and BABEL, within the framework of this Open Market Consultation.		
ORGANISER	Mónica Antón, Senior Consultant of Business & Strategy Area at SILO Company		
ATTENDANTS	NOMBRE	ENTIDAD	Presencial/Online
	Juan Corro	Ayuntamiento de Madrid	Presencial
	María Serena	Ayuntamiento de Madrid	Presencial
	Juan Carlos Álvarez	Ayuntamiento de Madrid	Presencial
	Diana Aguilar	Ayuntamiento de Madrid	Presencial
	Rebeca Herrera	Ayuntamiento de Madrid	Presencial
	José Miguel González	Ayuntamiento de Madrid	Presencial
	Jesús Cerezo	Ayuntamiento de Madrid	Presencial
	Marta Parro	Ayuntamiento de Madrid	Presencial
	Ana Reguero	Ayuntamiento de Madrid	Online
	José Manuel Carrasco	SGS	Presencial
	Patricia Isla	SGS	Presencial
	Francisco Merchán	BABEL	Online
	Cristina Melendi	SGS	Online
	Alfredo González	BABEL	Presencial
	José David Serna	BABEL	Presencial
	Mónica Antón	SILO	Presencial
ATTACHED FILES			



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CONCLUSIONS REPORT

Of the Open Market
Consultation (OMC):

AUTOMATION OF THE PROCESSING OF MUNICIPAL URBAN INTERVENTION MEANS

APRIL 2024



urbanismo, medio ambiente
y movilidad

MADRID



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JUAN CARLOS ALVAREZ RODRIGUEZ - DIRECTOR GENERAL
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