

# Feasibility Study on Automating Municipal Administrative Regularity Controls using Large Language Models

Automation with Artificial Intelligence in Public Administration

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#### Abstract

This feasibility study explores automating administrative regularity controls in Italian municipalities using Large Language Models (LLMs). We evaluated a system where LLMs select and complete compliance checklists for administrative acts, comparing its performance against human expert evaluations. Using various LLMs (including GPT-40 series, Llama 3 series, and Mistral-7B, with 70B models 4-bit quantized) and specifically engineered prompts, the system achieved approximately 80% accuracy and 70% balanced accuracy, significantly speeding up the process compared to manual review. While results show LLMs are a promising tool for increasing efficiency and consistency, limitations in handling legal nuances necessitate continued human oversight. The findings support the potential of LLMs as assistive tools within a human-in-the-loop framework for public administration compliance tasks.

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# Chapter 1

# Introduction

## 1.1 Artificial Intelligence

Artificial Intelligence (AI) is a broad field concerned with building systems capable of simulating intelligent behavior. It encompasses various approaches, including logic-based systems, search algorithms, and probabilistic reasoning.

Machine Learning (ML) is a significant subset of AI that focuses on methods that learn to make decisions or predictions by fitting mathematical models to observed data. Instead of being explicitly programmed for a task, ML models learn patterns and relationships from data. ML can be broadly categorized into:

- Supervised Learning: Models learn a mapping from input data to output predictions using labeled training examples (input-output pairs). Common tasks include regression (predicting continuous values, like house prices) and classification (assigning inputs to predefined categories, like identifying objects in images).
- Unsupervised Learning: Models learn from input data without corresponding output labels, aiming to uncover structure or patterns within the data. Generative models, a key type of unsupervised learning, learn to synthesize new data examples that resemble the training data.
- Reinforcement Learning (RL): An agent learns to make sequential decisions by interacting with an environment, receiving rewards or penalties for its actions, to maximize cumulative rewards.

Deep Learning (DL) is the process of fitting a specific type of ML model, known as deep neural networks, to data. Deep neural networks consist of multiple layers of interconnected nodes (neurons), allowing them to learn complex, hierarchical representations of data. They have become the state-of-the-art approach within all three major ML paradigms.

Natural Language Processing (NLP) is a field within AI and computer science focused on enabling computers to process, understand, generate, and interact with human language. Tasks within NLP include machine translation, text summarization, sentiment analysis, question answering, and more. Deep learning, particularly using

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architectures like Transformers, has become central to achieving state-of-the-art performance in many NLP tasks.

Large Language Models (LLMs) represent a significant advancement within NLP, based on deep learning architectures, most notably the Transformer. LLMs are pre-trained on vast amounts of text data, allowing them to store substantial factual knowledge implicitly within their parameters. The Transformer architecture, introduced by Vaswani et al. (2017)[19], relies entirely on attention mechanisms, specifically self-attention, to model dependencies between different parts of the input sequence, regardless of their distance. This contrasts with older recurrent models that process sequences sequentially. Key components include scaled dot-product attention and multi-head attention, which allows the model to jointly attend to information from different representation subspaces.

LLMs, often implemented as sequence-to-sequence (seq2seq) models like BART, excel at generation tasks. However, accessing and manipulating their internal knowledge precisely can be challenging. Approaches like Retrieval-Augmented Generation (RAG) aim to address this by combining the parametric knowledge of a pre-trained LLM with explicit, non-parametric knowledge retrieved from external sources (like a Wikipedia index)[13]. This hybrid approach allows the model to access and ground its generations in verifiable external information. [15]

## 1.2 Artificial Intelligence use in law context

Artificial Intelligence (AI), particularly the rapid advancements in Large Language Models (LLMs), is increasingly presenting compelling possibilities within the legal domain. These technologies offer potential for tasks ranging from legal research to improving access to information [4].

Recognizing both the potential and the inherent risks, particularly concerning accuracy, bias, and the implications of providing automated legal advice, regulatory bodies like the European Union are establishing foundational rules, such as the proposed AI Act. This Act aims to create a harmonized framework, classifying certain applications, including those assisting in legal interpretation or administration of justice, as 'high-risk' and subject to specific requirements [7].

As the potential for AI, particularly LLMs, to contribute meaningfully to the legal field becomes increasingly apparent, this thesis undertakes a feasibility study exploring a specific, alternative application distinct from direct legal advice. We investigate leveraging these models to automate the process-driven task of Municipal Administrative Regularity Control in Italy. This application, centered on document analysis and checklist compliance rather than legal judgment, represents a potentially permissible and beneficial use of AI within the evolving regulatory landscape, aiming to enhance efficiency and consistency in administrative oversight.

It is well-established within AI research for critical societal domains that Large Language Models offer significant potential for automating complex, knowledge-intensive tasks, such as legal document analysis and compliance checks. However, successfully deploying these models in high-stakes, regulated environments like law and public administration necessitates addressing inherent and well-documented challenges related to embedding deep domain expertise, ensuring data confidentiality,

achieving strict regulatory adherence, guaranteeing explainability and fairness, and mitigating model hallucination [3].

The established body of work on Legal NLP demonstrates that Large Language Models are increasingly utilized for tasks directly relevant to administrative regularity, such as document classification, information extraction, and compliance monitoring. Domain-specific model adaptation, often through fine-tuning or continued pretraining on legal corpora, is recognized as a key factor for enhancing performance in these specialized contexts. However, overcoming limitations in effectively processing long or ambiguous texts and consistently matching the nuanced judgment of human experts remain active and acknowledged areas of research within the field [18].

# 1.3 NLP and LLMs in Legal and Administrative Contexts

The application of Natural Language Processing (NLP) in the legal domain has gained significant traction in recent years, driven by the need to handle vast quantities of complex legal texts. Initial research efforts focused on tasks such as legal document summarization, contract analysis, and information extraction [12]. With the advent of large language models (LLMs), such as GPT-3 and GPT-4, there has been a notable shift toward leveraging these models to interpret and analyze legal language. Studies have shown that LLMs can effectively parse complex legal documents and provide summaries or extract relevant clauses, making them promising candidates for automating administrative audits [1]. In administrative contexts, LLMs have been explored for tasks ranging from automated compliance checks to decision support in regulatory matters, although the integration of such models into full-scale auditing processes remains an emerging research area.

It is important to note that the almost all AI governance documents focus on what to do with respect to making AI systems transparent, but left how to build them [2]. So when we start to think about AI automation we need to keep humans in the loop, and we need to make incremental improvements on the tools that we build [11]. Established research confirms the significant capability of large language models for zero-shot semantic annotation of legal and regulatory documents based solely on concise definitional prompts. This approach demonstrably reduces the technical and economic prerequisites for automating complex analysis tasks, such as administrative regularity control in municipal contexts [17].

# 1.4 Research Gaps

Despite the growing body of research on both administrative control and the application of NLP in the legal field, significant gaps remain. While traditional studies have extensively documented the inefficiencies and limitations of manual audits, few have explored the practical integration of LLMs to automate the selection and application of checklists in administrative control processes. In particular, the current literature does not fully address:

• The ability of LLMs to autonomously select the most appropriate checklist for

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a given administrative act based on detailed use-case descriptions.

Comparative evaluations between automated systems using LLMs and traditional manual inspections, especially in the context of Italian public administration.

• The impact of varying model parameters (e.g., temperature settings) and model sizes on the consistency and accuracy of automated compliance assessments.

These gaps justify the need for a novel LLM-based approach, as proposed in this study, to enhance the efficiency, reliability, and scalability of administrative regularity controls in public administrations. By addressing these issues, our work aims to provide a robust foundation for the adoption of AI-driven solutions in regulatory compliance and auditing processes.

#### 1.5 Problem Statement

This research is motivated by the need to streamline, accelerate, and automate the administrative regularity control process (Italian translation: Controllo di regolarità administrativa). The traditional manual approach, while thorough, can be inconsistent and prone to oversights due to its labor-intensive nature. By implementing an automated system using a large language model (LLM) to analyze municipal acts, it becomes possible to more efficiently identify irregularities. This study addresses the challenge of enhancing the detection of compliance issues within public administration through advanced artificial intelligence techniques.

# 1.6 Research Questions and Hypotheses

The study is driven by the following research questions (RQ) and corresponding hypotheses:

- 1. **RQ1**: Can the LLM correctly select the checklist of the act? *Hypothesis*: Yes, since the models are capable to understand and summarize the act, they will be able to select the correct checklist.
- 2. **RQ2**: Can the LLM respond to each point of the checklist? *Hypothesis:* Yes, as the checklist is designed to require only minimal legal interpretation from the employee.
- 3. **RQ3**: Does varying the temperature parameter affect model performance, and is a lower temperature preferable for consistent results? *Hypothesis*: Yes, temperature changes will affect the output, with lower temperatures likely yielding more consistent and reliable results.
- 4. **RQ4**: Do larger models with more parameters perform better? *Hypothesis:* Yes, larger models are expected to perform better due to their enhanced capacity to understand and process complex texts.

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## 1.7 Objectives

The primary objectives of this feasibility study are to:

• Assess the effectiveness of the LLM in answering checklist-based questions point by point.

- Investigate the impact of varying model parameters, such as temperature settings, on performance and consistency.
- Compare the performance of different model sizes, hypothesizing that larger models with more parameters yield better results.
- Provide practical insights on automating administrative auditing processes, with a focus on improvements in efficiency and accuracy.

# 1.8 Overview of the Study Design and Approach

The study adopts a methodological approach that involves:

- Data Collection: Gathering checklists from the municipalities of Olbia and Lucca, which serve as the basis for the administrative control criteria.
- Data Preparation: Transforming these checklists into JSON format to facilitate their integration into the automated system. Additionally, municipal acts are downloaded from the official public bulletin ("albo pretorio" in Italian) and converted into plain text.
- Automated Analysis: Using a structured prompt, the LLM is tasked with answering the checklist questions based on the content of the municipal acts. Our system includes code that enables the LLM to automatically choose the most appropriate checklist for each act based on the detailed use-case descriptions provided within each checklist.
- Comparative Evaluation: The outputs generated by the LLM are compared against evaluations conducted by human experts. This comparative analysis, detailed in the Results section, focuses on performance metrics such as accuracy, precision, recall, and consistency.

In summary, the integration of advanced language models into the process of administrative regularity control offers a promising solution to improve the efficiency and reliability of audits in public entities, thereby contributing to more transparent and regulation-compliant management. Detailed technical implementations and the code repository are available on GitHub <sup>1</sup>, while the performance evaluation metrics will be discussed in subsequent sections.

<sup>&</sup>lt;sup>1</sup>The repo is at : github.com/alessandropisent/Tesi\_Magistrale

# Chapter 2

# Administrative compliance control

## 2.1 Background

In the context of Italian public administrations, the administrative and accounting regularity control (*Italian translation: Controllo di regolarità administrativa*) is a crucial function aimed at ensuring that every entity operates in compliance with the applicable laws and regulations. This process is governed by Article 147-bis of the "Testo Unico degli Enti Locali (TUEL)". According to Article 147-bis TUEL, the control process is divided into two main phases [8]:

- **Preventive Control:** During the formation of the act, each service manager is required to express an opinion on technical regularity, certifying the correctness and compliance of the administrative action. At the same time, the financial service manager issues an accounting regularity opinion and affixes the financial coverage endorsement, ensuring that the act has the necessary economic resources.
- Subsequent Control: After the adoption of the act, a control is carried out following the general principles of corporate auditing. This phase is conducted under the direction of the entity's secretary, who randomly selects determinations of expenditure commitments, contracts, and other administrative acts using motivated sampling techniques. The results of this control are then periodically transmitted to the service managers, auditors, employee evaluation bodies, and the municipal council, along with directives to correct any irregularities detected.

The primary objective of these controls is to ensure the legitimacy, regularity, and correctness of administrative actions, thereby preventing inefficiencies, abuses, or regulatory violations. However, the traditional process of relying on manual inspections is time-consuming, resource-intensive, and susceptible to human errors or omissions.

In this work we will focus on the Subsequent Control. To address these challenges and improve the efficiency of controls, we have developed an automated system that leverages Large language models (LLMs). Our system is designed not only to analyze administrative acts but also to autonomously select the most appropriate checklist for each document based on detailed use-case descriptions provided within each checklist. In practice, the LLM examines the content of the act and determines which checklist to apply for verifying compliance with the regulations. Subsequently, the model responds to each point in the selected checklist, evaluating the act's conformity with the established criteria. This innovative approach not only accelerates the control process but also reduces the likelihood of errors, ensuring a more accurate and consistent evaluation.

## 2.2 Checklist development

The verification of administrative regularity for public acts is a critical function within public administration. While theoretically, this assessment could be conducted by an individual possessing formal legal qualifications, the need for consistent and standardized evaluation across numerous procedures and different personnel has led public entities, such as municipalities, to adopt a structured approach. To achieve this standardization, specific checklists are developed internally. These checklists, tailored precisely to the requirements of the corresponding public act under review, guide designated public employees - who may not necessarily be legal experts - through the systematic verification process, ensuring uniform application of the relevant rules and regulations.

# 2.3 Use of AI in public Administrations

It is well-established within public administration and regulatory scholarship that while Generative AI offers considerable potential to enhance governmental efficiency by supporting tasks such as document analysis and drafting relevant to administrative regularity control, its practical implementation necessitates careful management. Experts recognize that effectively integrating these technologies requires addressing significant, known challenges related to output accuracy, data security, potential bias, and alignment with core administrative law principles, typically involving robust human oversight and adherence to risk-based governance frameworks [21].

# Chapter 3

# Experimental Setup and Implementation

## 3.1 Research Design

This study adopts a mixed-method approach that integrates automated text analysis using a large language model (LLM) with traditional manual evaluation methods. The feasibility study is structured to assess the LLM's ability to evaluate administrative acts by comparing its outputs against those generated by human experts. The overall framework comprises data collection, checklist integration, automated querying, and performance benchmarking.

To structure the automation process and facilitate independent testing, we conceptualized the core LLM-driven tasks as two distinct functional components, referred to here in a simplified sense as "agents". Each agent is designed to perform a single, specific action within the overall administrative control workflow. This separation allowed for a focused evaluation of the LLM's effectiveness in executing each sub-task individually.

The first agent is responsible for checklist selection. Its function is to analyze the content of an administrative act ("determina") and identify the most appropriate checklist from the predefined set, based on the descriptions and criteria embedded within each checklist's JSON definition. The second agent handles the checklist completion task. Once a checklist is selected (either manually for testing or by the first agent), this second agent systematically processes each point, querying the LLM to evaluate the determination against the specific instruction and criterion of that point, ultimately providing a compliance assessment (e.g., "SI", "NO", "NON PERTINENTE").

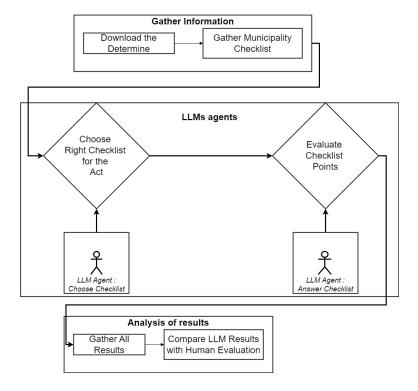
This modular design, while simplifying the initial feasibility study and enabling targeted performance analysis, represents an intermediate step. The intention for a future, fully integrated system is to combine these functionalities into a single, more sophisticated agent. This unified agent would autonomously perform the entire sequence: reading and understanding the administrative act, selecting the correct checklist, and then proceeding to complete the evaluation point by point, thereby fully automating the core assessment process.

## 3.2 Workflow Diagram

A workflow diagram (Figure 3.1) summarizes the entire process that has been done.

- 1. Data Collection: Download PDFs and extract text.
  - (a) Download the "Determine" (i.e. the acts the we want to analyze)
  - (b) Preprocess the PDF files
  - (c) Gather the Municipality Checklists: Gather all the necessary checklists from the municipalities
- 2. LLMs agents: This was the main focus of the study
  - (a) Choose the right checklist for the act: The llm agent chooses the right checklist needed for the act based on the content of the act and the description of the checklist
  - (b) **Evaluate Checklist Points**: the agent answer every point of the checklist
- 3. **Analysis of the result**: Main block that will be discussed in the next Chapter (Ch 4)
  - (a) Gather all the response from all the LLMs agents
  - (b) Process the results from the LLMs
  - (c) Compare LLMs responses to Human Evaluation

Figure 3.1 The architecture and workflow followed



#### 3.3 Data Collection Process

Municipal documents, specifically determinations (or determina) available on the public bulletin (or "albo pretorio"), form the primary data source. For each document, the following steps are undertaken:

- Document Acquisition: Download PDF files of relevant determinations.
- **Text Extraction**: Convert each PDF into plain text using Python-based tools, ensuring the content is accessible for further processing.
- Checklist Selection: Use a CSV file that maps the document names to their associated checklists.

### 3.3.1 Checklists Integration

To standardize the evaluation process, a series of checklists was compiled based on the administrative control requirements used by public administration entities. These checklists were transformed into a JSON format, allowing the division of each checklist into individual questions. Each checklist point includes specific instructions that guide the evaluation of the act in question. In the Appendix there is the template for the JSON that is used in this study (see Appendix C.1).

#### 3.4 LLMs agents

#### 3.4.1 LLMs Usage

The LLMs are central to this study. Its role is to analyze the text extracted from municipal determinations and respond to each point of the checklist. The process involves:

#### • Prompt Design and Configuration:

A structured prompt template was created to guide the LLM. The template includes:

- Instructions to the model as an expert in administrative law.
- A clear layout where each checklist point is presented as a question.
- A predefined answer format (e.g., SI/NO/NON PERTINENTE with a brief explanation if needed).

#### • Extraction and Analysis Process:

The LLM is queried for each checklist point using the custom prompt. The responses, initially in long text form, are processed using regular expressions to extract the essential output: namely, a categorical answer (SI, NO, NON PERTINENTE) and a concise explanation when necessary. A Python script orchestrates this process and aggregates the results into a CSV file.

#### • Human Evaluation Procedure for Benchmarking:

To benchmark the LLM's performance, a parallel manual evaluation was conducted. A human expert compiled a checklist-based assessment for each determination. The automated results were then compared against these manually obtained values to assess accuracy and reliability.

#### 3.4.2 LLM Agent : Choose Checklist

#### **Design Choices**

Developing the agent responsible for selecting the appropriate checklist for a given administrative act involved several key considerations, particularly regarding prompt structure and model configuration.

One primary investigation focused on the optimal placement of the administrative act's text ("determine") within the prompt structure provided to the LLM. Two main approaches were considered: placing the "determina" text within the initial system/developer prompt alongside the core instructions, or including it within the user prompt immediately preceding the specific question about checklist selection. Preliminary experiments indicated that placing the "determina" text directly within the user prompt yielded more accurate checklist selection results for the models tested in this specific task context. Consequently, this structure was adopted for the main experiments involving checklist selection.

Furthermore, to assess the robustness and generalizability of the selection capability, different Large Language Models were employed (e.g., comparing models like "gpt-4o-mini", "gpt-4o"...). Performance variations across models were analyzed to understand the impact of model size and architecture on this specific administrative task.

The influence of the "temperature" parameter was also explored systematically. Recognizing that the review of administrative checklists can sometimes involve a degree of interpretation or discretion by the human operator, different temperature settings (e.g., ranging from 0.0 for maximum determinism to 1.0 for increased variability/creativity) were tested. The aim was to investigate whether higher temperatures might allow the LLM to better handle nuances or borderline cases in act classification, while lower temperatures were expected to yield more consistent and predictable selections. This exploration helped in identifying the optimal balance between reliability and flexibility for the checklist selection agent.

#### **Prompt**

The prompt designed for the checklist selection agent also employed a two-part structure, assigning specific instructions to the system/developer role and the core query to the user role.

The system prompt established the LLM's persona as an expert in administrative law, tasked with supporting a municipal employee by identifying the correct checklist to apply to a given administrative determination (determina). Crucially, the system prompt contained a detailed, multi-step procedure for the LLM: first, to read the different checklists provided (specifically, their names and detailed descriptions,

3.4 LLMs agents

which were dynamically inserted into the prompt); second, to read the full text of the determina; third, to carefully consider which checklist description best matched the content and purpose of the act; and finally, to respond only with the name of the selected checklist, potentially followed by brief explanatory notes. The list of available checklists, along with their NomeChecklist and detailed Descrizione (purpose, context, application criteria) fields from the structured JSON checklist file (e.g., checklists\_Lucca.json, checklists\_Olbia.json), was explicitly provided within this system prompt to serve as the basis for the selection.

The user prompt then presented the actual task: it asked "A QUALE CHECK-LIST APPARTIENE LA SEGUENTE DETERMINA?" (Which checklist does the following determination belong to?), reiterated the strict output format (only the name of one of the provided checklists, plus optional notes), and then presented the full text of the determina itself. This design aimed to leverage the LLM's text comprehension abilities to match the administrative act's content against the functional descriptions of the checklists provided in the system prompt, thereby automating the selection process based on predefined criteria.

#### 3.4.3 LLM Agent : Answer Checklist

#### **Design Choices**

The second agent developed in this study is responsible for the core task of evaluating an administrative act against the points of a selected checklist. This involved designing an automated workflow to interact with the LLM for each checklist item and systematically testing different configurations.

From an implementation perspective, this agent iterates through each point defined in the selected checklist's JSON structure. For every point, a specific prompt is generated using the structure detailed previously (Section 3.4.2). This prompt incorporates the system instructions defining the LLM's role, the text of the administrative act ("determina"), and, crucially, the specific text ("Punto") and accompanying interpretation guidelines ("Istruzioni") for the checklist item currently under evaluation. The "ChecklistCompiler.py" script orchestrates this process.

Similar to the checklist selection agent, the checklist completion agent was tested using various LLMs of different sizes and capabilities (e.g., "gpt-4o-mini" vs. "gpt-4o") to assess the impact of model scale on this more granular question-answering task. A range of temperature settings (e.g., 0.0, 0.01, 0.2, 0.5, 1.0) was also systematically evaluated. Lower temperatures were hypothesized to promote consistency and adherence to the checklist instructions, while higher temperatures were explored to see if they could better handle potential ambiguities or nuances in the administrative text requiring more flexible interpretation, mirroring the discretion a human evaluator might apply.

A critical step in the implementation involved processing the LLM's responses. Since the models often generate verbose explanations alongside their core answer, a response parsing mechanism using regular expressions was implemented (ref. "analize\_response" method in "ChecklistCompiler.py" ). This function extracts the essential categorical evaluation (SI, NO, or NON PERTINENTE) from the model's output text. Standardizing the output in this manner was necessary to enable

quantitative comparison against the ground truth evaluations provided by human experts, as detailed in the Results chapter (Chapter 4). The effectiveness of this agent across the different configurations was then rigorously benchmarked using metrics such as accuracy and balanced accuracy (Section ??).

#### **Prompt**

The prompt engineering for the checklist completion agent utilized a structured two-part format, defining distinct roles for the system (developer) and the user, as specified in the prompt template file.

The system prompt was designed to establish the LLM's persona as an expert assistant in Italian administrative law, tasked specifically with verifying the administrative regularity of a director's determination (determina) against provided checklist points. This system prompt included detailed, step-by-step instructions for the LLM: read the checklist point and its instructions, read the full determination text (which was embedded within this system prompt), verify compliance, and respond using one of the predefined categories: "SI" (compliant), "NO" (non-compliant, potentially indicating severity), or "NON PERTINENTE" (not relevant, with a brief explanation). It explicitly requested simple, clear language and an ordered response format.

The user prompt, conversely, was dynamic for each checklist item. It provided the specific context for the query by injecting the checklist point's text (Punto), its detailed interpretation instructions (Istruzioni), and its unique identifiers (num, Sezione if applicable). Crucially, the user prompt also reinforced the desired output structure by explicitly requesting the answer in the format "RISPOSTA GENERALE : [SI, NO, NON PERTINENTE], [spiegazione sintetica se necessaria]". This dual-prompt structure aimed to clearly define the agent's role, task, and constraints while providing the specific details needed for evaluating each individual checklist requirement against the administrative act. ă

#### 3.5 Models Used

This study employed a range of Large Language Models (LLMs) and software libraries to implement and evaluate the automated administrative checklist verification system.

To assess the feasibility and performance variations, several state-of-the-art LLMs from different families and sizes were investigated. The selection included models from OpenAI, Meta, and Mistral AI. Specifically, the following models were evaluated:

#### • OpenAI GPT Series:

- "gpt-4o"
- "gpt-4o-mini"

These proprietary models were accessed via the official OpenAI API.

#### • Meta Llama Series:

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- "llama 3.1 8B Instruct"
- "llama 3.1 70B Instruct"
- "llama 3.2 3B Instruct"
- "llama 3.3 70B Instruct"

These open source models represent different sizes and versions within the Llama family.

#### • Mistral AI Series:

- "Mistral v0.3 7B Instruct"

This open source model was the only one in the family that was tested.

A key practical consideration involved running the open source models locally. The 70-billion parameter Llama models ("llama-3.1-70B" and "llama-3.3-70B") exceed the memory capacity of typical research GPUs in their standard precision formats (FP16). To address this, these larger models were loaded using **4-bit quantization**. Quantization reduces the memory footprint and computational requirements by representing the model's weights with lower precision (4 bits per parameter instead of 16 or 32), enabling them to fit within the available GPU memory resources, albeit with a potential trade-off in prediction accuracy that this study implicitly evaluates through its comparative results[9, 14].

#### 3.6 Libraries Used

The implementation of the experimental workflow, including data processing, prompt generation, model interaction, and evaluation, relied primarily on Python and its ecosystem of libraries. The key libraries used for interacting with the LLMs were:

- Hugging Face "transformers" Library: This library was essential for loading, configuring, and running the open-weight models (Llama and Mistral series) locally on the available hardware. It provides a standardized interface for accessing pre-trained models and managing tasks like text generation and quantization.
- OpenAI Python Client Library: Interaction with the proprietary GPT models ("gpt-40" and "gpt-40-mini") was managed using the official OpenAI API and its corresponding Python client library. This allowed for sending prompts and receiving generated checklist evaluations from OpenAI's servers.

Other Python libraries were used for auxiliary tasks such as text extraction from PDFs, data manipulation (e.g., "pandas"), regular expression processing for response parsing ("re"), and file handling. The evaluation metrics were computed using the "scikit-learn" library.

## 3.7 Implementation Challenges

During implementation, several challenges were encountered:

- **Text Extraction Issues:** Converting PDFs to clean text sometimes resulted in formatting problems or loss of information.
- **Prompt Engineering:** Designing prompts that reliably guided the LLM was iterative; adjustments were made to ensure clarity and precision in the responses.[20]
- Regex Limitations: Extracting the standardized SI/NO/NON PERTI-NENTE responses from long texts required robust regular expressions, which sometimes needed fine-tuning to accommodate unexpected output variations.
- Model Variability: Different temperature settings and model sizes influenced the consistency of outputs, necessitating multiple pilot tests.

#### 3.8 Pilot Tests

Before finalizing the experimental setup, several pilot tests were conducted:

- **Hyper-Parameter Tuning:** Experiments with various temperature settings helped determine the optimal balance between creativity and consistency in responses.
- Validation: Initial tests compared the LLMs responses with a small set of manually evaluated documents to fine-tune the prompt design and extraction process.
- Iterative Refinement: Feedback from pilot tests led to improvements in the prompt template, regex patterns, and overall processing pipeline, ensuring that the final system was robust and reliable.

# Chapter 4

# Results and Analysis

#### 4.1 Ground Truth for Performance Evaluation

To evaluate the performance of the Large Language Model (LLM) based system in automating administrative regularity checks, a ground truth dataset was established. This dataset serves as the benchmark representing the correct evaluation outcomes as determined by human expertise.

The ground truth was constructed based on a selected set of administrative acts: three acts (*determine*) from the Municipality of Lucca and one act from the Municipality of Olbia. These acts were evaluated against their corresponding checklists, resulting in approximately 60 manually verified checklist points.

Establishing this ground truth was made possible through the collaboration with Promo PA Fondazione, which facilitated contact with a professional experienced in municipal administrative regularity control. This expert manually reviewed each selected administrative act and meticulously completed the associated checklists according to standard procedures. These human-generated evaluations constitute the "gold standard" against which the LLM's automated assessments were compared. The comparison allowed for quantitative measurement of the automated system's performance in replicating human judgment for this specific administrative task.

It is widely acknowledged within AI evaluation that static benchmarks inadequately capture the complexities and risks of LLMs in real-world applications; consequently, human interaction evaluations (HIEs), which assess the process and outcomes of human-model engagement, are essential for understanding true performance and bridging the sociotechnical gap in specific use contexts like administrative control. This approach is critical as performance in isolated tests often fails to predict outcomes when models interact with or replace human processes [11].

# 4.2 Output Processing: Checklist Selection Agent

The primary function of the first LLM agent was to select the single most appropriate checklist for a given administrative act (determina) from a predefined list. The prompt designed for this agent (detailed in Appendix ??) explicitly instructed the LLM to output **only** the name (NomeChecklist) of the selected checklist (e.g., "Determine", "Contratti", "Affidamento Diretto"). Optional brief notes were permitted

but the core expected output was strictly the checklist name.

However, LLMs can sometimes produce outputs that deviate from strict formatting instructions, potentially including introductory phrases, explanations for the choice, or concluding remarks. To ensure the system could reliably use the agent's selection, a straightforward text processing step was implemented. This step focused on extracting the intended checklist name from the raw text generated by the LLM, discarding any extraneous content. This ensured that only the valid NomeChecklist identifier was passed on for the subsequent checklist answering phase or for evaluation purposes, maintaining the workflow's integrity even with minor variations in the LLM's verbosity.

## 4.3 Output Processing: Checklist Answering Agent

The second LLM agent was tasked with evaluating the administrative act against each point of the selected checklist. The prompt (detailed in Appendix ??) required the LLM to provide a categorical assessment for each checklist point using one of three predefined labels: "SI" (compliant), "NO" (non-compliant), or "NON PERTINENTE" (not relevant)[. The prompt explicitly requested this evaluation in a specific format: RISPOSTA GENERALE: [SI, NO, NON PERTINENTE], [spiegazione sintetica se necessaria].

Despite these instructions, practical experimentation revealed that the raw output from the LLMs often contained additional text beyond the core categorical answer and the optional brief explanation. This could include conversational filler, restatements of the checklist point, detailed justifications even when not required, or slight variations in the output structure (e.g., using different casing or omitting the "RISPOSTA GENERALE:" prefix).

To enable automated comparison against the human-generated ground truth and ensure consistent data for analysis, it was crucial to standardize these potentially verbose or inconsistently formatted responses. Therefore, a response parsing mechanism was implemented using regular expressions (regex). This mechanism, encapsulated in the "analize\_response" function within the "ChecklistCompiler.py" program, was designed to robustly identify and extract only the core categorical answer ("SI", "NO", or "NON PERTINENTE") from the LLM's raw text output, ignoring surrounding text and handling minor formatting variations. The resulting standardized, single-word answer (stored as the 'Simple' value in evaluation dataframes) provided the clean, consistent data necessary for the performance metric calculations presented in Section 4.4.

#### 4.4 Performance Metrics

To quantitatively assess the LLM-based system's performance against the established ground truth, several standard evaluation metrics for classification tasks were employed. The primary goal was to measure how accurately the system could replicate the human expert's evaluation for each checklist point, classifying it as compliant ('SI'), non-compliant ('NO'), or not relevant ('NON PERTINENTE').

- Accuracy: This metric measures the overall correctness of the LLM's predictions. It is calculated as the ratio of correctly classified checklist points (where the LLM's answer matches the ground truth) to the total number of checklist points evaluated.
- Balanced Accuracy: To address potential class imbalance, balanced accuracy was also computed. It calculates the average accuracy obtained on each class individually. It is the average of recall obtained on each class, providing a better measure of performance when the number of 'SI', 'NO', and 'NON PERTINENTE' cases in the ground truth is uneven.
- Confusion Matrix: A confusion matrix provides a detailed breakdown of prediction results. It is a table showing the counts of true positive (TP), true negative (TN), false positive (FP), and false negative (FN) predictions for each class ('SI', 'NO', 'NON PERTINENTE'). This allows for a granular analysis of where the model succeeds and fails (e.g., does it confuse 'NO' with 'SI' often?).
- **F1-Score**: The F1-score is the harmonic mean of precision and recall, providing a single metric that balances both concerns. A high F1-score indicates that the model has both low false positives and low false negatives. The weighted F1-score averages the F1-score for each class, weighted by support.

These metrics collectively offer a comprehensive view of the LLM's performance, highlighting not only its overall accuracy but also its reliability in identifying specific compliance outcomes and handling potential imbalances in the data.

#### 4.4.1 Accuracy

The graphs illustrate the accuracy of different LLM families (Llama, Mistral, GPT) across temperature settings ranging from 0.0 to 1.0. A clear trend emerges where the GPT models (green bars) consistently outperform the Llama (blue bars) and Mistral (orange bars) families in terms of raw accuracy at most temperature settings. Accuracy for some models, particularly GPT-40, tends to be highest at lower temperatures (e.g., 0.0, 0.2) and decreases slightly or becomes more variable at higher temperatures. Mistral and Llama models show varying performance, with Mistral generally achieving higher accuracy than Llama models across several temperatures.

When comparing the best-performing model from each family, GPT-40 maintains the highest accuracy, especially at lower temperatures. "Mistral v0.3 7B" shows competitive accuracy, particularly at mid-range temperatures (e.g., 0.6), while the best Llama models lag behind the other two families. The impact of temperature appears less predictable for Mistral and Llama compared to GPT-40, where lower temperatures yield peak accuracy.

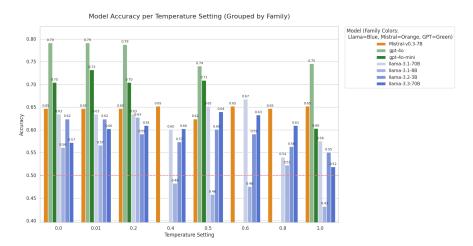
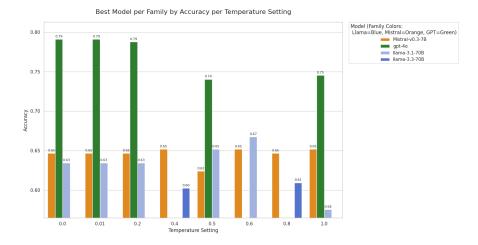


Figure 4.1 Models accuracy bar graph, grouped by family of models

Figure 4.2 Models accuracy bar graph, using the best for each family of models



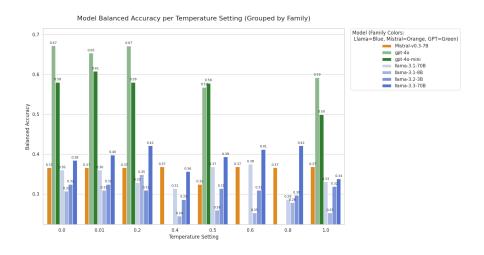
### 4.4.2 Balanced Accuracy

The graph presenting Balanced Accuracy reveals performance trends across model families and temperature settings. Balanced accuracy is calculated as the average of recall obtained on each class ("SI", "NO", "NON PERTINENTE") individually. This metric is particularly important because the ground truth dataset appears to be imbalanced, likely containing a significantly higher number of "SI" (compliant) instances compared to "NO" (non-compliant) and "NON PERTINENTE" (not relevant) instances, as suggested by the confusion matrices and the nature of compliance checks.

In such imbalanced scenarios, standard accuracy can be misleadingly high if a model simply performs well on the dominant "SI" class while failing to correctly identify the rarer, but potentially more critical, "NO" or "NON PERTINENTE" cases. Balanced accuracy mitigates this by giving equal importance to the performance on each class. Consequently, if models struggle more with the minority classes (like

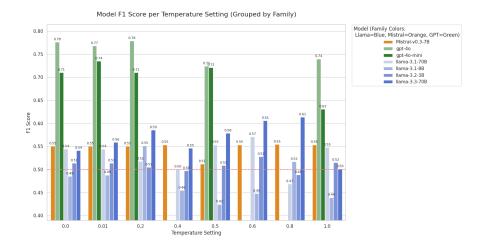
"NO"), the balanced accuracy scores may appear lower than the standard accuracy scores. This difference highlights that while overall correctness (standard accuracy) might seem high, the model's ability to reliably detect non-compliance or irrelevance might be weaker.

Observing the graph, the GPT family generally maintains the highest balanced accuracy, suggesting a more consistent performance across all outcome types compared to Mistral and Llama families. While the absolute scores might be slightly lower than standard accuracy for some models, balanced accuracy provides a crucial and more realistic evaluation of the models' effectiveness in handling the uneven distribution of compliance outcomes inherent in this administrative task. It underscores the importance of evaluating models not just on overall correctness but on their capability across all classification categories.



#### 4.4.3 F1 Score

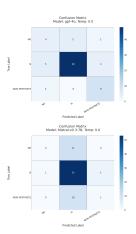
The F1-Score graph, which balances precision and recall, further reinforces the performance hierarchy. GPT models generally exhibit the highest F1 scores, suggesting they are effective at minimizing both false positives and false negatives. The trends across temperature settings are consistent with the accuracy and balanced accuracy results, highlighting the strong performance of GPT-40, particularly at lower temperatures. Mistral models show respectable F1 scores, while Llama models generally score lower.



#### 4.4.4 Confusion Matrix

#### **GPT 40 Confusion Matrix**

**GPT-40** (temperature 0.0): This model shows high accuracy, correctly classifying a large number of "SI" cases (48 true positives). However, it exhibits some confusion, notably misclassifying 5 "NO" cases as "SI" (false positives for "SI") and 4 "SI" cases as "NON PERTINENTE" (false negatives for "SI"). It also misclassified 2 "NON PERTINENTE" cases as "NO".



Mistral-v0.3-7B (temperature 0.0): This model also performs reasonably well, correctly identifying 34 "SI" cases. Its primary errors include misclassifying 11 "NO" cases as "SI" and 10 "NON PERTINENTE" cases as "SI" (significant false positives for "SI"). It also misclassified 7 "SI" cases as "NON PERTINENTE".

# Chapter 5

# Discussion and Conclusion

# 5.1 Key Findings

Our experimental results indicate that the automated system achieves an accuracy of approximately 80% and a balanced accuracy of around 70% when compared with human evaluations. This demonstrates that, while the LLM-based approach is feasible, human oversight remains essential. Notably, the LLM did not perform as exceptionally as initially hypothesized for a simple question-answering task. We observed that the model's accuracy might be enhanced by incorporating more contextual information about the act, especially in cases involving significant monetary values, where stricter adherence to checklist criteria is imperative. Furthermore, our evaluation revealed that the automated process is considerably faster: while human review of each act takes between 15 to 30 minutes, the LLM completes the evaluation in approximately 2 minutes per act. An important aspect of our findings is that the model tends to err on the side of caution by classifying acts as non-compliant even when they might pass the check. This conservative approach is advantageous, as it ensures that any potential irregularity is flagged for human review rather than mistakenly approving an act.

# 5.2 Feasibility and Effectiveness

Our tests have confirmed the feasibility of utilizing LLMs in the domain of administrative regularity control. By conducting a thorough hyperparameter search, particularly focusing on the temperature setting, we found that lower temperature values generally result in more consistent and reliable outputs. Although the current accuracy is promising, it still falls short of replacing human evaluators entirely. Future work will be directed toward enhancing the model's performance, potentially by integrating additional context and refining the prompt engineering strategy. The promising speed and reasonable accuracy suggest that with further improvements, the system could effectively support administrative audits.

## 5.3 Advantages and Limitations

The primary advantage of our automated approach is the significant reduction in the time and human resources required for administrative audits. With the LLM handling the initial screening, the process becomes considerably more efficient, which could alleviate the workload on municipal staff. However, several limitations were also identified:

- Complex Legal Terminology: The specialized legal language and synonymous terms in administrative acts present challenges for the LLM. There are instances where a human expert might recognize that two terms are synonymous, whereas the model may not.
- Acronyms and Abbreviations: Administrative documents often contain acronyms that are not well-defined within the text, which can confuse the model and impact its ability to accurately interpret the act.

These limitations underscore the need for further development and integration of domain-specific knowledge into the model.

# 5.4 Implications for Municipalities

The integration of an LLM-based auditing system in municipal administrations could have significant positive implications. If further refined, such a system can reduce the administrative burden, speed up the evaluation process, and enhance the overall transparency and accountability of public administration. By ensuring that even minor irregularities are flagged for further review, municipalities can maintain high standards of regulatory compliance. However, it is crucial to retain a human-in-the-loop framework to verify and interpret the model's outputs, especially given the current limitations in handling nuanced legal language.

# 5.5 Scalability Considerations

While our methodology has proven effective on a smaller scale, its scalability to other municipalities and contexts requires careful consideration. The approach can be adapted to different types of administrative documents, provided that the documents are pre-processed into a standardized format and the checklists are appropriately customized for local legal and regulatory frameworks. Scaling this system will involve addressing challenges related to the variability in document structure, legal terminology, and the need for more extensive context extraction. Future work should explore these adaptations and consider the integration of additional data sources to further enhance the system's robustness.

In summary, while the current LLM-based approach demonstrates significant promise in automating administrative regularity controls, it is not yet a complete replacement for human auditors. Nonetheless, it offers a viable and efficient tool that, with further refinement, could substantially improve the auditing processes within public administrations.

5.6 Discussion 25

#### 5.6 Discussion

When analyzing the It is important to considerIt is well-established in the field that large language models (LLMs) predominantly exhibit English-centric capabilities, leading to significant performance limitations when applied to non-English languages, especially those considered low-resource or requiring domain-specific knowledge like legal texts. Addressing this gap requires targeted multilingual model development and alignment strategies, as standard models often lack the necessary linguistic nuance and specialized data for effective performance in such contexts [16].

It is well-established within public administration and AI governance studies that while AI systems offer potential efficiencies for public entities, their deployment demands careful scrutiny due to heightened requirements for accountability, transparency, and fairness, alongside prevalent institutional capacity limitations and the inherent risks of bias and opacity in algorithmic decision-making. This context underscores the criticality of assessing novel AI applications, like LLMs for compliance checks, against these established public sector benchmarks and challenges [10].

Within the field of AI ethics, it is established knowledge that deploying datadriven systems, especially those intended to augment or replace human judgment in sensitive domains like public administration, requires careful consideration of inherent ethical risks. These risks prominently include algorithmic bias stemming from data or design, the challenges of ensuring transparency and explainability in complex models, and the crucial need to define clear frameworks for responsibility and accountability when these systems are used for regulatory decision-making [5].

Acknowledged within the field of administrative law and artificial intelligence, the integration of machine learning systems for governmental functions, such as administrative regularity control, is recognized as compatible with core legal doctrines like nondelegation, due process, and transparency when appropriately implemented. Experts understand that such algorithmic tools, applied thoughtfully within areas like adjudication and rule enforcement, hold substantial potential to improve the efficiency, accuracy, and consistency of administrative decisions [6].

# **Bibliography**

- [1] ARIAI, F. AND DEMARTINI, G. Natural Language Processing for the Legal Domain: A Survey of Tasks, Datasets, Models, and Challenges (2025). arXiv: 2410.21306, doi:10.48550/arXiv.2410.21306.
- [2] Bell, A., Nov, O., and Stoyanovich, J. Think About the Stakeholders First! Towards an Algorithmic Transparency Playbook for Regulatory Compliance (2022). arXiv:2207.01482, doi:10.48550/arXiv.2207.01482.
- [3] CHEN, Z. Z., ET AL. A Survey on Large Language Models for Critical Societal Domains: Finance, Healthcare, and Law (2024). arXiv:2405.01769, doi: 10.48550/arXiv.2405.01769.
- [4] CHEONG, I., XIA, K., FENG, K. J. K., CHEN, Q. Z., AND ZHANG, A. X. (A)I Am Not a Lawyer, But...: Engaging Legal Experts towards Responsible LLM Policies for Legal Advice. In *The 2024 ACM Conference on Fairness, Accountability, and Transparency*, pp. 2454–2469. ACM, Rio de Janeiro Brazil (2024). ISBN 979-8-4007-0450-5. doi:10.1145/3630106.3659048.
- [5] Christoforaki, M. and Beyan, O. AI Ethics—A Bird's Eye View. *Applied Sciences*, **12** (2022), 4130. doi:10.3390/app12094130.
- [6] COGLIANESE, C. AND LEHR, D. Regulating by Robot: Administrative Decision Making in the Machine-Learning Era (2017). arXiv:2928293.
- [7] COMMISSION, E. Proposal for a REGULATION OF THE EUROPEAN PAR-LIAMENT AND OF THE COUNCIL LAYING DOWN HARMONISED RULES ON ARTIFICIAL INTELLIGENCE (ARTIFICIAL INTELLIGENCE ACT) AND AMENDING CERTAIN UNION LEGISLATIVE ACTS (2021).
- [8] Testo unico delle leggi sull'ordinamento degli enti locali (tuel). Decreto Legislativo 18 agosto 2000, n. 267 (2000). Pubblicato nella Gazzetta Ufficiale n. 227 del 28 settembre 2000 Supplemento Ordinario n. 162. Si fa riferimento specifico all'Art. 147-bis ("Controllo di regolarità amministrativa e contabile"). Testo vigente.
- [9] GHOLAMI, A., KIM, S., DONG, Z., YAO, Z., MAHONEY, M. W., AND KEUTZER, K. A survey of quantization methods for efficient neural network inference (2021). Available from: https://arxiv.org/abs/2103.13630, arXiv:2103.13630.

28 Bibliography

[10] HICKOK, M. Public procurement of artificial intelligence systems: New risks and future proofing. Ai & Society, (2022), 1. doi:10.1007/s00146-022-01572-2.

- [11] IBRAHIM, L., HUANG, S., AHMAD, L., AND ANDERLJUNG, M. Beyond static AI evaluations: Advancing human interaction evaluations for LLM harms and risks. *arXiv*, (2024). doi:10.48550/ARXIV.2405.10632.
- [12] KATZ, D. M., HARTUNG, D., GERLACH, L., JANA, A., AND II, M. J. B. Natural Language Processing in the Legal Domain (2023). arXiv:2302.12039, doi:10.48550/arXiv.2302.12039.
- [13] Lewis, P., et al. Retrieval-Augmented Generation for Knowledge-Intensive NLP Tasks (2021). arXiv:2005.11401.
- [14] LI, S., NING, X., WANG, L., LIU, T., SHI, X., YAN, S., DAI, G., YANG, H., AND WANG, Y. Evaluating quantized large language models. In *Forty-first International Conference on Machine Learning* (2024). Available from: https://openreview.net/forum?id=DKKg5EFAFr.
- [15] PRINCE, S. J. Understanding Deep Learning. The MIT Press (2023). Available from: http://udlbook.com.
- [16] QIN, L., CHEN, Q., ZHOU, Y., CHEN, Z., LI, Y., LIAO, L., LI, M., CHE, W., AND YU, P. S. A survey of multilingual large language models. *Patterns*, 6 (2025), 101118. doi:10.1016/j.patter.2024.101118.
- [17] SAVELKA, J. AND ASHLEY, K. D. The unreasonable effectiveness of large language models in zero-shot semantic annotation of legal texts. *Frontiers in Artificial Intelligence*, 6 (2023), 1279794. doi:10.3389/frai.2023.1279794.
- [18] SIINO, M., FALCO, M., CROCE, D., AND ROSSO, P. Exploring llms applications in law: A literature review on current legal nlp approaches. *IEEE Access*, **13** (2025), 18253. doi:10.1109/ACCESS.2025.3533217.
- [19] VASWANI, A., SHAZEER, N., PARMAR, N., USZKOREIT, J., JONES, L., GOMEZ, A. N., KAISER, L., AND POLOSUKHIN, I. Attention Is All You Need (2023). arXiv:1706.03762, doi:10.48550/arXiv.1706.03762.
- [20] VATSAL, S. AND DUBEY, H. A Survey of Prompt Engineering Methods in Large Language Models for Different NLP Tasks (2024). arXiv:2407.12994, doi:10.48550/arXiv.2407.12994.
- [21] WEERTS, S. Generative AI in public administration in light of the regulatory awakening in the US and EU. Cambridge Forum on AI: Law and Governance, 1 (2025), e3. doi:10.1017/cfl.2024.10.

# Appendix A

# Prompts Used

# A.1 LLM Agent: Choose Checklist

#### Italian Prompt

Here is the actual prompt that was used, in Italian.

Listing A.1 Prompt for the agent that choose the checklist - Italian

```
2
      "role": "user",
3
      "content" : [{
          "type": "text",
          "text":f"### A QUALE CHECKLIST APPARTIENE LA SEGUENTE DETERMINA?:
5
                 ### Output (solo nome checklist):
                 {' , '.join(list_names_checklists)} -- (note eventuali)
10
                 ########## ------ DETERMINA -----
11
                 {determina}
12
      }]
13
14 }
15 {
      "role": "developer",
16
17
      "content" : [{
18
          "type": "text",
          "text":f" Sei un assistente esperto in materia di diritto amministrativo. Il tuo
19
            compito è supportare un impiegato comunale nel controllo della regolarità
            amministrativa di una determina dirigenziale.
20
21
                 Segui i passaggi seguenti:
22
                 1. Leggi le checklists fornite
                 2. Leggi il testo della determina.
                 3. Rispondi dicendo quale checklist va applicata alla determina tra le
24
                     seguenti:
25
                 {'\n'.join([f'3.{i+1}.
                      **{list_names_checklists[i]}**:{list_descri_checklists[i]}' for i in
                     range(len(list_names_checklists))])}
26
                 4. Pensa attentamente quali di queste descrizioni sono più pertinenti alla
                     determina
27
                 5. RISPONDI SOLO CON NOME CHECKLIST
28
29
                 ### Output (solo nome checklist):
                 {' '.join(list_names_checklists)} -- (note eventuali)
30
31
32
```

```
33 Utilizza un linguaggio semplice e accessibile. Rispondi in maniera chiara e ordinata.

34 "
35 }]
36 }
```

#### **English Prompt**

Here there is the translation of the prompt used

Listing A.2 Prompt for the agent that choose the checklist - English

```
1 {
2
3
      "content": [{
          "type": "text",
4
 5
          "text": f"### WHICH CHECKLIST DOES THE FOLLOWING DETERMINATION BELONG TO?:
6
7
                 ### Output (checklist name only):
 8
                 {' , '.join(list_names_checklists)} -- (any notes)
9
                 ########## ----- DETERMINATION -----
10
11
                 {determination}"
      }7
12
13 }
14 {
      "role": "developer",
15
      "content": [{
16
          "type": "text",
17
          "text": " You are an expert assistant in administrative law.
18
                 Your task is to support a municipal employee in checking the administrative
19
                     regularity of a management determination.
20
                 Follow the steps below:
21
                 1. Read the provided checklists
22
                 2. Read the text of the determination.
23
                 3. Respond by stating which checklist should be applied to the determination
                      from the following:
24
                 {'\n'.join([f'3.{i+1}.
                      **{list_names_checklists[i]}**:{list_descri_checklists[i]}' for i in
                      range(len(list_names_checklists))])}
25
                 4. Think carefully about which of these descriptions are most relevant to the
                      determination
                 5. RESPOND ONLY WITH CHECKLIST NAME
26
27
                 ### Output (checklist name only):
28
29
                 {' '.join(list_names_checklists)} -- (any notes)
30
31
32
                 Use simple and accessible language. Respond clearly and orderly."
33
      }]
34 }
```

# A.2 LLM Agent: Answer Checklist

#### Italian Prompt

Here is the actual prompt that was used, in Italian.

Listing A.3 Prompt for the agent that compile the checklist - Italian

```
1 {
2  "role": "user",
```

```
"content" : [{
3
          "type": "text",
 4
          "text":f"### Istruzioni
5
 6
                 {istruzioni}
7
                 ### Rispondi al punto {num}, SEZIONE: {sezione}:
8
9
                 {punto}
10
11
                 ### Output:
12
                 RISPOSTA GENERALE : [SI, NO, NON PERTINENTE], [spiegazione sintetica se
                      necessaria]
13
14
      }]
15 }
16 {
17
      "role": "developer",
      "content" : [{
18
19
          "type": "text"
          "text":f"Sei un assistente esperto in materia di diritto amministrativo. Il tuo
20
             compito è supportare un impiegato comunale nel controllo della regolarità
             amministrativa di una determina dirigenziale.
21
22
                 Segui i passaggi seguenti:
                 1. Leggi la checklist fornita, che contiene punti numerati e specifiche
23
                      normative da verificare.
24
                 2. Leggi il testo della determina.
                 3. Per ogni punto della checklist, verifica se l'istruzione è rispettata.
25
26
                 4. Rispondi per ogni punto utilizzando uno dei seguenti criteri:
27
                 - **SI**: Il punto della checklist e relative istruzioni sono rispettate
                      [NESSUNA ANOMALIA]
28
                 - **NO**: La determina NON passa il controllo, il punto della checklist NON è
                      rispettato [ANOMALIA RILEVATA: LIEVE o GRAVE]
29
                 - **NON PERTINENTE**: Il punto della checklist non è pertinente alla
                      determina. Aggiungi una spiegazione sintetica. [NESSUNA ANOMALIA]
30
                 6. Alla fine, aggiungi eventuali 'Note finali' se ci sono problemi generali o
                      ambiguità rilevate nella determina.
31
32
                 Utilizza un linguaggio semplice e accessibile. Rispondi in maniera chiara e
                      ordinata.
33
                 ########## ----- DETERMINA -----
34
35
                 {determina}
36
37
      }]
38 }
```

#### **English Prompt**

Here there is the translation of the prompt used

**Listing A.4** Prompt for the agent that compile the checklist - English

```
1 {
2
      "role": "user",
3
      "content": [{
          "type": "text".
4
          "text": "### Instructions
5
6
                 {instructions}
7
8
                 ### Answer point {num}, SECTION: {section}:
9
                 {point}
10
11
                 ### Output:
                 GENERAL RESPONSE : [YES, NO, NOT RELEVANT], [brief explanation if necessary]"
12
13
```

```
14 }
15 {
16
      "role": "developer",
      "content": [{
17
          "type": "text",
18
          "text": "You are an expert assistant in administrative law. Your task is to support
19
             a municipal employee in checking the administrative regularity of a management
             determination.
20
21
                 Follow the steps below:
22
                 1. \ \ Read \ the \ provided \ checklist, \ which \ contains \ numbered \ points \ and \ specific
                     regulations to verify.
23
                 2. Read the text of the determination.
24
                 3. For each point on the checklist, check if the instruction is respected.
25
                 4. Answer for each point using one of the following criteria:
26
                 - **YES**: The checklist point and related instructions are respected [NO
                     ANOMALY]
27
                 - **NO**: The determination does NOT pass the check, the checklist point is
                     NOT respected [ANOMALY DETECTED: MILD or SEVERE]
28
                 - **NOT RELEVANT**: The checklist point is not relevant to the determination.
                     Add a brief explanation. [NO ANOMALY]
                 6. At the end, add any 'Final Notes' if there are general problems or
29
                      ambiguities detected in the determination.
30
31
                 Use simple and accessible language. Respond clearly and orderly.
32
33
                 ########## ------ DETERMINATION -----
                 {determination}"
34
35
      }]
36 }
```

## Appendix B

# Municipalities Checklists

### B.1 Lucca Checklists

#### B.1.1 Determine

This checklist is used to audit and verify the compliance of administrative acts (referred to as "determine") within a municipality. It ensures that each act meets the required legal and procedural standards by evaluating various key aspects:

- Authority and Competence: Verifies whether the determination correctly identifies the competent authority or manager responsible for issuing the act, often established by a formal decree.
- **Document Structure:** Checks that the determination is properly organized, including sections such as the header, preamble, motivation, decision, and indications of the authorizing authority, deadlines for appeal, and references to the document's digital archive.
- Legal References: Ensures the document includes both general normative references (for example, references to overarching laws such as TUEL) and specific legal references (such as specific contract codes or internal regulations).
- Inclusion of Activities: Confirms that any activities mentioned in the determination are consistent with other planning documents (such as budgeting or program plans), and that timelines and project phases are clearly delineated.
- Explicit Motivation: Verifies that the act provides clear reasoning and justification, citing both factual premises and legal bases.
- Responsibility and Delegation: Checks for clarity on roles, such as the identification of the person responsible for the process or the delegation of duties, ensuring that responsibilities are properly assigned.
- **Preventive Measures:** Assesses whether the determination includes measures to prevent conflicts of interest, ensure transparency (such as publication requirements), and other specific protective steps related to performance objectives.

- Privacy and Confidentiality: Ensures that the act adheres to data protection and confidentiality regulations where applicable.
- **Timeliness:** Confirms that the act respects the required procedural timeframes and deadlines.
- Additional Notes: Allows for the identification of any further observations or critical issues, such as opportunities for simplification, digitalization, focus on specific priorities like equal opportunity or accessibility.

### SCHEDA DI CONTROLLO DETERMINAZIONE PIANO DI AUDITING 2024

### Gruppo Interno Controllo Atti DD sorteggiate 1^ semestre

N.	Determina n	<b>100</b>	Note
1	Competenza organo/dirigente individuato con decreto		
2	Articolazione dell'atto in intestazione preambolo/premessa, parte motivazione, dispositivo, indicazione autorità e termini per ricorrere, riferimenti al deposito nel fascicolo digitale degli atti afferenti il procedimento amm.vo ex art. 41 CAD (gestione documentale)		
3	Affidabilità <b>riferimenti normativi</b> di carattere generale es. TUEL		
4	Affidabilità riferimenti <b>normativi specifici e</b> s. Codice dei contratti Regolamenti Ente		
5	Nel caso di attività inserite negli atti di programmazione Coerenza con:  - DUP e PIAO  - Bilancio di Previsione se trattasi di DD con spesa;  - cronoprogramma in fase di esecuzione (lavori, forniture, servizi — SITAT e altre banche dati)		
6	Esplicitazione motivazione con puntuale indicazione presupposti di fatto e ragioni giuridiche (riferimenti normativi e/o regolamentari)		
7	1) Responsabile del Procedimento ovvero distinzione tra responsabile del procedimento e del provvedimento; se è la EQ responsabile del provvedimento (delega di firma) indicare l'attribuzione/delega del Dirigente  2) indicare RUP delegato per fase		
8	Indicazione misure di prevenzione pertinenti rispetto allo specifico provvedimento, ad es: - conflitto di interessi (per il PNRR obbligatorio sempre chiedere la		



	dichiarazione)  - obblighi di pubblicità ai sensi delle Delibere ANAC 2023 per contratti finiti o in corso al 31.1.2023  - obblighi di pubblicità ai sensi del Dlvo 36/2023, art. 28  Qualora il provvedimento sia funzionale al raggiungimento di un obiettivo di performance, dare atto del rispetto delle misure di protezione inserite nelle fasi di PIAO		
9	Rispetto normativa sulla tutela della riservatezza laddove rilevante		
10	Rispetto dei <b>tempi</b> e dei termini del procedimento		
11	Altre annotazioni/criticità in merito: a. possibilità di semplificare b. possibilità di digitalizzare c. fare un focus specifico d. pari opportunità e. accesso		
12	ALTRO		

#### B.1.2 Contratti

This checklist is tailored to the review of public contracts, focusing on verifying that contracts comply with administrative and legal standards, particularly those governing public procurement and contract management:

**NOTE:** There is a slight typo where the point 3 and 4 are infact the same point, so we need to read them as one.

- Nature and Specifics of the Contract: Confirms that the contract clearly states its nature (for instance, whether it is a commercial letter or a formal contract) and includes all necessary details and identifiers.
- References to Authorizing Determination: Verifies that the contract document includes references to the original determination that authorized the contract, along with relevant legal norms.
- Selection Criteria: Ensures that the criteria used for selecting the economic operator (e.g., competitive bidding, direct awarding) are clearly specified. This includes referencing the required documentation or evidence of previous experience, as stipulated by relevant regulations.
- Payment Terms: Checks that the contract outlines specific payment terms for invoices, including any conditions or thresholds (such as payments exceeding 30 days).
- Completion Deadlines: Verifies that the contract specifies the deadlines for the conclusion of the contracts services or works.
- Funding Sources: Confirms that the contract indicates if the funds are subject to accountability and reporting requirements.
- **Privacy Compliance:** Ensures that there is an explicit acknowledgment of adherence to privacy regulations concerning the handling of personal data.
- Code of Conduct: Checks for a reference to the code of conduct applicable to public employees, ensuring ethical compliance in the contract process.
- E-Procurement Platform Use: Verifies that the contract notes the use of electronic procurement platforms (e.g., Start, Consip, Mepa) which are essential for public transparency and compliance with national procurement databases.

### SCHEDA DI CONTROLLO CONTRATTI PUBBLICI artt 1325 e 1655 codice civile PIANO DI AUDITING 2024 - CONTRATTI 1^ SEMESTRE APPALTI E CONCESSIONI: SCRITTURE PRIVATE e LETTERE COMMERCIALI (non in forma pubblica amministrativa rogati dal Segretario)

<b>CONTRATTO</b> :	approvato con DD	Firmato da	• • • • • • • • • • • • • • • • • • • •
- LAVORI			
- SERVIZI			
- FORNITURE			

N.	CONTRATTO		Note
1	Natura del contratto: lettera commerciale, contratto		
2	Riferimenti alla DD di affidamento e alla normativa		
3	CRITERIO di SELEZIONE operatore economico - Estremi o riferimento a gara (procedure aperte o ristrette) - Estremi o riferimento ad affidamento diretto anche senza confronto tra differenti preventivi, il comma 1 dell'art. 50 sottolinea l'importanza del possesso di "documentate esperienze pregresse idonee all'esecuzione delle prestazioni contrattuali"		
4	Art. 50, c. 1 Dlvo 36/2023 Regolamento UE 2495 del 15/11/2023 per le soglie comunitarie  importo stimato lavori fino a 150.000 servizi forniture sino a 140.000 affidamento diretto  da 150.000 a 1.000.000 procedura negoziata senza bando previa consultazione 5 OE  procedura ordinaria per lavori di importo pari o superiore a 1.000.000 e fino alle soglie di rilevanza europea  inferiore a 5.000 senza principio di rotazione		
5	Tempi di pagamento fatture (specificare se superiori a 30 giorni o fare riferimento ad atto richiamato)		
6	Termini di conclusione della prestazione/lavori		
7	Specificare se sono fondi soggetti a rendicontazione		
8	Specificare la normativa sulla privacy per i dati personali		
9	Richiamato il codice di comportamento dei dipendenti		
10	Piattaforma di e-procurement: Start, Consip Mepa ai fini della pubblicità su Banca Dati Nazionale/PCT ANAC		

B.2 Olbia Checklist 39

#### B.2 Olbia Checklist

#### **B.2.1** Determine a Contrarre

#### Key Features of the Checklist

### 1. Purpose and Scope

- **Objective:** The checklist is used to assess the correctness and completeness of the "determina a contrarre" document. It ensures that the determination includes all necessary identifiers, normative references, and procedural details as mandated by legislation and municipal guidelines.
- Possible Answers: Reviewers must respond to each item with one of three possible answers: "SI" (Yes), "NO" (No), or "NON RICHIESTO" (Not Required), indicating whether the element is correctly included or applicable.

#### 2. Normative References

- The checklist starts by listing a comprehensive set of legal references that must be considered when reviewing the document. These references include various legislative decrees, laws, and guidelines (e.g., D.Lgs. n. 267/2000, Legge n. 241/1990, D.L. 6 luglio 2012 n. 95, among others), as well as specific directives from regional and local bodies.
- These references provide the legal framework within which the determination must be evaluated, ensuring that all statutory and regulatory requirements are met.
- 3. Evaluation Points Organized by Sections The checklist is divided into several sections, each focusing on different aspects of the determination:
  - General Identifying Elements of the Act:
    - Intestazione and Oggetto: Verify that the document includes details about the issuing authority, the organizational structure (sector, service), and a clear subject line that includes the correct code and legal basis.
    - **Identification Codes:** Ensure that unique identifiers like the CIG/CUP, CPV codes, and cost centers are correctly reported.

### • Elements Related to the Issuing Entity:

- Authority and Delegation: Check if the document includes details about the decree of appointment for the responsible manager or the delegation of signing authority if the signing is performed by someone other than the primary executive.
- Designation of Responsible Personnel: Confirm that the determination provides the required information for the nomination of the project manager (RUP) or any other responsible figure, along with contact details and relevant mandates.

#### • Normative References:

- Specific Norms: Assess whether the determination explicitly cites the specific normative provisions (such as the Code of Public Contracts) that justify the content of the act.
- General Norms and Principles: Verify that general legal frameworks (e.g., TUEL, Legge n. 241/90) are included when necessary to support the logical structure of the determination.
- Principles and Interpretative Norms: Check the inclusion of guiding principles, especially those related to administrative discretion and the prioritization of results, as required by specific legislative articles.

### • Typical Elements Specific to the Contracting Act:

- Procedural Details: Evaluate if the document sets out clear deadlines for concluding the procedure and identifies the expected outcome of the contracting process.
- Project Elements: Check for detailed information on elements such as the object of the contract, execution costs, and the proposed economic framework, which include budget estimations and financial commitments.
- Additional Technical and Environmental Criteria: Ensure that any mandatory technical or environmental criteria (like DUVRI for safety, minimum environmental criteria for public contracts) are detailed.

#### • Accounting and Financial References:

- Budgetary and Financial Commitments: Confirm that the determination includes references to the approved budget, any relevant financial authorizations (e.g., PEG, bilancio pluriennale), and ensures compliance with public finance rules.
- Transparency in Financial Reporting: Verify that details regarding expenditure, funding, and any ANAC contributions are explicitly stated.

### • Transparency and Anti-Corruption Measures:

- Publication Requirements: Check whether the determination meets transparency obligations, such as the publication of acts on the official online bulletin (Albo Pretorio Online).
- Regularity Certifications: Ensure that the document indicates that it will be forwarded for financial regularity checks, as required by law.
- Formal Regularity Aspects: Signatures and Approvals: Confirm that the determination includes the necessary signatures from the designated officials (e.g., the signing manager, RUP) and any other required approvals to validate the act.



	FAMIGLIA	DETERMINA A CONTRARRE	SI	NO	NON RICHIESTO	ANTICORRUZIONE
	Determina N. DEL	COD. 15271 (da inserire nell'oggetto della determina)				
	Data					
	Operatore che compila la scheda					
	PARAMETRO	NOTE				
A	ELEMENTI GENERALI IDENTIFICATIVI DELL'ATTO					
1	Intestazione: Settore, Servizio e Autorità che emana il provvedimento e tipo di provvedimento.	Nella determina oltre il settore va indicato il servizio di appartenenza presente nella macrostruttura vigente.				
2	Oggetto della determinazione	Indica in sintesi il contenuto del provvedimento, inserendo nell'oggetto il codice corretto (15271) e la norma attributiva del potere.				1
3	Indicazione del CIG e /o del CUP del CUI, del CPV	Il CUI va inserito nel caso di affidamenti per appalti di lavori d'importo pari o superiore a 150.000 euro o di beni e servizi d'importo pari o superiore a 140.000 euro Per il CPV Il documento del Presidente dell'Autorità del 9 maggio 2023 n. 2 spiega il funzionamento del Vocabolario dei Codici CPV e le modalità di utilizzo per la scelta del codice adatto al singolo appalto individuare i CPV del vocabolario principale con un livello di classificazione non				1



	costo al quale imputare la spesa.			
В	ELEMENTI RIFERITI AL SOGGETTO CHE ADOTTA L'ATTO			
5	Estremi decreto sindacale di nomina del dirigente.	Decreto di conferimento dell'incarico di responsabilità che autorizza l'adozione dell'atto. In caso di facente funzione citare il decreto di sostituzione dei dirigenti momentaneamente assenti.		
6	Estremi della delega alla firma dell'atto, se persona diversa dal Dirigente.			1
7	Estremi atto di nomina del Responsabile del Progetto.	Indicazione del nominativo e recapito di posta elettronica. I riferimenti devono essere indicati nel corpo dell'atto. Se il Responsabile del Procedimento non è stato espressamente nominato, ai sensi dell'art. 15 del Dlgs n.36/2023, l'incarico è svolto dal responsabile dell'unità organizzativa competente per l'intervento  Il nuovo codice (art.15) consente di individuare modelli organizzativi, i quali prevedano la nomina di un responsabile di procedimento per le fasi di programmazione, progettazione ed esecuzione e un responsabile di procedimento per la fase di affidamento. In questo caso occorre definire i rispettivi compiti e responsabilità "il suddetto RUP è anche responsabile di procedimento per le fasi di programmazione, progettazione, affidamento ed esecuzione ai sensi dell'art. 4 della L. 241/90" oppure "il		1

		suddetto RUP è anche responsabile di procedimento per le fasi di programmazione, progettazione, ed esecuzione ai sensi dell'art. 4 della L. 241/90 mentre il Responsabile di procedimento della fase di affidamento è"		
8	Conflitto d'interessi	Art. 16. (Conflitto di interessi) Si ha conflitto di interessi quando un soggetto che, a qualsiasi titolo, interviene con compiti funzionali nella procedura di aggiudicazione o nella fase di esecuzione degli appalti o delle concessioni e ne può influenzare, in qualsiasi modo, il risultato, gli esiti e la gestione, ha direttamente o indirettamente un interesse finanziario, economico o altro interesse personale che può essere percepito come una minaccia alla sua imparzialità e indipendenza nel contesto della procedura di aggiudicazione o nella fase di esecuzione. "Rilevato il pieno rispetto, in fase istruttoria e di predisposizione degli atti, delle disposizioni contenute nel Codice di comportamento dei dipendenti pubblici e l'insussistenza, ai sensi dell'art.16 del Dlgs n.36/2023 di conflitto di interesse in capo al firmatario del presente atto, al RUP, agli altri partecipanti al procedimento e in relazione ai destinatari finali dello stesso"		
C	RIFERIMENTI NORMATIVI			
9	Normativa specifica: Codice dei contratti pubblici (D.Lgs. n. 36.2023.); L.R. n. 8/2018 e ss.mm.ii. (per quanto applicabile);	Il soggetto che emette l'atto fa constare che lo stesso è conforme alle disposizioni di legge vigenti in materia. La normativa specifica deve essere sempre indicata con specificazione dell'articolo e, se del caso, del comma, applicato.		



	Art. 1, D.L. 6 luglio 2012 n. 95 convertito dalla legge 7 agosto 2012, n. 135 (adesione convenzione Consip); Art. 1, comma 450, della legge 27 Dicembre 2006, n. 296 e ss.mm.ii. (per quanto applicabile); Art. 26, della legge n. 488/1999 e ss.mm.ii.; DPCM 24 dicembre 2015.	L'elenco della 1° colonna è riportato a titolo meramente esemplificativo in quanto applicabile alle singole fattispecie. La normativa specifica deve essere indicata quale peculiare presupposto di diritto in relazione alla concreta fattispecie di cui alla determinazione. (ad es. per acquisizione di una fornitura, il presupposto di fatto coincide con le fattispecie indicate dalle norme cui si fa riferimento?)  Sono precisati gli eventuali vincoli – anche procedurali – derivanti dalla normativa?		
10	Normativa generale: TUEL; Legge n. 241/90; DPR n. 62/2013 Codice comportamento dipendenti pubblici; L. n. 190/2012; D.Lgs. n. 33/2013; Legge n.136/2010.	Debbono essere indicati presupposti normativi di carattere generale in termini strettamente essenziali qualora risultino necessari quale supporto alla piena comprensione del processo logico alla base del provvedimento. In ogni caso i presupposti normativi generali sono elencati solamente nel caso in cui non siano indicati nella normativa specifica. Il criterio di fondo da adottare è quello che seleziona ed indica esclusivamente le norme che risultano correlate con lo specifico provvedimento;		
11	Norme di principio Art. 4 del Dlgs n.36/2023. (Criterio interpretativo e applicativo)	Il nuovo codice dei contratti attribuisce un importante ruolo alle norme di principio attraverso le quali la pubblica amministrazione esercita la discrezionalità amministrativa e tecnica.  Occorre richiamare le norme di principio solo nel caso in cui la fattispecie in parola richieda anche l'utilizzo di norme di principio al fine di finalizzare ad un determinato risultato l'interpretazione (legittima) di norme giuridiche, o al fine di giustificare la scelta di una determinata procedura (ad es. indagini preliminari di mercato, determinazione a contrarre		

B. Municipalities Checklists

		per affidare un contratto di concessione in luogo di un appalto)  L'art. 4 stabilisce che" le disposizioni del codice si interpretano e si applicano in base ai principi di cui agli articoli 1, 2 e 3."  A sua volta l'art.1 del Dlgs n.36/2023 stabilisce che il principio del risultato costituisce criterio prioritario per l'esercizio del potere discrezionale e per l'individuazione della regola del caso concreto, nonché per:  a) valutare la responsabilità del personale che svolge funzioni amministrative o tecniche nelle fasi di programmazione, progettazione, affidamento ed esecuzione dei contratti;  b) attribuire gli incentivi secondo le modalità previste dalla contrattazione collettiva.  Di norma risulta indispensabile indicare in che modo nella fattispecie concreta si sono contemperati tra loro i principi codicistici con l'obiettivo prioritario del risultato in termini di qualità, tempestività, economicità		
12	Regolamenti dell'ente quali: - Statuto Comunale; - Regolamento di contabilità; - Regolamento dei contratti			
D	ELEMENTI TIPICI DELLA DETERMINAZIONE A CONTRARRE			
13	Termini per la conclusione della	Ai sensi dell'art. 17, comma 3 le stazioni appaltanti e gli enti		



	procedura	concedenti concludono le procedure di selezione nei termini indicati nell'allegato I.3. Il superamento dei termini costituisce silenzio inadempimento e rileva anche al fine della verifica del rispetto del dovere di buona fede, anche in pendenza di contenzioso. Il termine può essere indicato tramite una data o indicando la scadenza a decorrere dalla data di avvio della procedura. Il Rup può motivare un termine superiore. Il termine decorre dal bando per le procedure aperte, dall'invito a presentare offerta per le procedure ristrette e negoziate. Negli affidamenti diretti non sussiste un termine ex lege		
14	Fine che con il contratto si intende perseguire	Requisito previsto dall'art. 192 del D.Lgs. n. 267/2000		3
15	Oggetto del contratto	Requisito previsto dall'art. 192 del D.Lgs. n. 267/2000 Negli appalti di lavori: progetto esecutivo completo di quanto previsto all'allegato I.7 del Dlgs. N36/2023 (ove non già approvato)  Nei beni e servizi: capitolato d'appalto oppure quaderno d'oneri, oppure schema di contratto (ove non già approvato)		3
16	DUVRI (per i servizi)	Il DUVRI redatto in conformità a quanto previsto dall'art. 26 del d.lgs. n. 81/2008; (oppure) l'attestazione del progettista che certifica che non è necessario redigere il DUVRI in quanto (Si veda l'art. 26 del d.lgs. n. 81/2008) e, di conseguenza, risulta superflua la quantificazione degli oneri pertinenti la sicurezza da rischio interferenziale, da corrispondere all'operatore economico; i costi per l'attuazione delle misure di contrasto alle		

		interferenze pari ad €(solo in presenza di DUVRI)		
17	Costo della mano d'opera; contratto applicabile			
18	Suddivisione in lotti	Ai sensi dell'art. 58 le stazioni appaltanti motivano la mancata suddivisione dell'appalto in lotti tenendo conto dei princìpi europei sulla promozione di condizioni di concorrenza paritarie per le piccole e medie imprese ( la motivazione dovrebbe essere nel bando o nell'avviso) "ai sensi dell'art. 58 del Dlgs n.36/2023, l'appalto, peraltro già accessibile, dato l'importo non rilevante, per le microimprese, piccole e medie imprese, non è suddivisibile in lotti aggiudicabili separatamente in quanto";		
19	Validazione (in caso di lavori pubblici)	Il bando e la lettera di invito per l'affidamento dei lavori devono contenere gli estremi dell'avvenuta validazione del progetto posto a base di gara.		
20	Criteri Ambientali minimi	Per tutti gli appalti è necessario verificare se rientrano o meno nell'applicazione dei CAM . In Italia, l'efficacia dei CAM è stata assicurata grazie all'art. 18 della L. 221/2015 e all'art. 57 comma 2 Dlgs n.36/2023 .  Da inserire nella determinazione "lavori, la fornitura/servizio rientrano/non rientrano nell'ambito di applicazione dei criteri ambientali minimi adottati ed in vigore in base al Piano per la sostenibilità ambientale dei consumi del settore della pubblica amministrazione (ove rientrino indicare il DM)"		



21	Forma del contratto	Requisito previsto dall'art. 192 del D.Lgs. n. 267/2000 La determina dovrà indicare espressamente la tipologia del contratto da adottare, quali: - Atto Pubblico Amministrativo; - Scrittura privata autenticata; - Scrittura privata non autenticata; - Lettera commerciale, altro.		3
22	Clausole del contratto ritenute essenziali	Requisito previsto dall'art. 192 del D.Lgs. n. 267/2000 e dall'art. 17 del D.Lgs. n. 36/2023.  Indicare i requisiti di ordine generale e speciale richiesti nonché eventuali ulteriori requisiti essenziali (ad es. esclusione automatica offerta anomala ex art. 54 del Codice; limitazioni all'avvalimento ex art. 104 del Codice; tipologia del criterio di selezione dell'offerta ex art. 107 e ss del Codice; requisiti minimi di esecuzione previsti nel Capitolato speciale d'appalto, etc). ove i predetti requisiti siano contenuti nel capitolato o nei documenti approvati con la determina a contrarre è sufficiente rimandare ad essi.		3
23	Cauzione provvisoria	Spetta al RUP stabilire in che misura sono richieste cauzioni. L'art. 106 stabilisce che l'offerta è corredata da una garanzia provvisoria pari al 2 per cento del valore complessivo della procedura indicato nel bando o nell'invito. Per rendere l'importo della garanzia proporzionato e adeguato alla natura delle prestazioni oggetto dell'affidamento e al grado di rischio a esso connesso, la stazione appaltante può motivatamente ridurre l'importo sino all'1 per cento oppure incrementarlo sino al 4 per cento.		

B. Municipalities Checklists

				1	-
24	Modalità di scelta del contraente e ragioni che ne sono alla base (motivare in modo specifico) e criteri di selezione delle offerte	Requisito previsto dall'art. 192 del D.Lgs. n. 267/2000 e dall'art. 17 del D.Lgs. n. 36/2023  Negli appalti d'importo superiore alle soglie UE è necessario motivare la scelta della specifica tipologia e della procedura adottata in relazione al principio del risultato:  "La procedura (aperta, ristretta, negoziata, competitiva con negoziazione, dialogo competitivo, accordo quadro) è quella maggiormente rispondente al principio del risultato applicato all'appalto in parola."  Sussiste la necessità di specificare:  1. I requisiti di partecipazione e selezione richiesti ai partecipanti  2. La modalità di valutazione delle offerte (prezzo più basso, offerta economicamente più vantaggiosa, costo nel ciclo di vita)  3. I criteri di valutazione delle offerte tecniche e delle offerte economiche nel caso di offerta economicamente più vantaggiosa  Occorre una specifica motivazione:  1. In caso di appalto integrato  2. In caso di concessione o altro contratto di PPP  3. In caso si disponga di riservare agli enti del terzo settore o a cooperative sociali il diritto di partecipare alle procedure per l'affidamento (art. 129)  Le procedure d'importo inferiore alle soglie UE si svolgono di norma in applicazione dell'art. 50 del Dlgs n.36/2023. Ove il RUP intenda derogarvi (ad es. stabilendo di svolgere una procedura aperta per lavori d'importo inferiore alle soglie UE euro in luogo di una procedura negoziata o di un affidamento		3	

		diretto) deve provvedere a motivare adeguatamente la sua scelta Ove la determina a contrarre approvi anche il Bando, avviso, è possibile rimandare ad essi		
25	Rotazione degli affidamenti	Nelle procedure ordinarie (aperta, ristretta, competitiva con negoziazione, dialogo competitivo) non, si applica il principio di rotazione. Non si applica la rotazione (previa motivazione) alle procedure negoziate di cui all'art. 76		
26	Indicazione dell'importo massimo stimato a base di gara Quadro economico dell'intervento comprensivo di Importo a base di gara, oneri fiscali, costi della sicurezza/interferenziali, revisione dei prezzi, somme a disposizione, supporto al RUP, incentivi (art. 45) modificazioni del contratto preventivabili, proroga, lavori o servizi analoghi, quinto d'obbligo	La determinazione dei costi presunti deve essere formulata sulla base di elementi oggettivi: riferimento a precedenti acquisti, indagini di mercato, riferimento ad acquisiti analoghi effettuati da altre Amministrazioni, riferimento ai prezzi pattuiti nelle convenzioni CONSIP anche se scadute.		3
27	Riferimenti all'obbligo di utilizzo degli strumenti di acquisto e di negoziazione messi a disposizione da CONSIP e da soggetti aggregatori	La determina dovrà indicare:  - Con riferimento all'art. 1, comma 449, della Legge 27 dicembre 2006, n. 296 di aver verificato che sul mercato elettronico non sono reperibili i beni o i servizi oggetto di appalto ovvero sono presenti beni o servizi simili ma inidonei per mancanza delle qualità essenziali, (il MEPA		2

Municipalities Checklists

Griglia di valutazione determinazione dirigenziale							
	<ul> <li>è utilizzabile per i soli appalti d'importo inferiore alle soglie UE)</li> <li>Con riferimento all'art. 26 legge 488/1999 non sono attive convenzioni CONSIP o CAT Sardegna, ovvero si sono utilizzati i parametri di prezzo-qualità delle suddette convenzioni, come limiti massimi, per l'acquisto di beni e servizi comparabili oggetto delle stesse.</li> <li>Con riferimento all'art. 1, comma 7, del D.L. 95/2012 (conv. in Legge 7 agosto 2012 n. 135) di aver verificato che il bene o servizio in oggetto non rientra tra le categorie merceologiche previste ovvero che non sono attive le relative convenzioni o altri strumenti d'acquisto o negoziazione Consip o Cat Sardegna.</li> <li>Con riferimento alla al DPCM 24 dicembre 2015 che il bene o servizio in oggetto non rientra tra le categorie di beni e servizi previste ovvero non raggiunge le relative soglia Con riferimento all'art. 1, comma 512, della Legge 28 dicembre 2015, n. 208 che il bene o servizio in oggetto non rientra tra i beni e servizi informatici e di connettività ovvero che vi rientra ma non sono reperibili convenzioni e l'amministrazione ha la necessità ed urgenza di procedere all'acquisto per assicurare la continuità della gestione amministrativa, oppure il bene o il servizio previsto nelle convenzioni non è idoneo al soddisfacimento dello specifico fabbisogno dell'amministrazione e quest'ultima ha la necessità ed urgenza di procedere all'acquisto per assicurare la continuità della gestione amministrativo per assicurare la continuità della gestione amministrazione e quest'ultima ha la necessità ed urgenza di procedere all'acquisto per assicurare la continuità della gestione amministrativa</li> </ul>						



28	Riferimenti alla qualificazione del Comune quale Stazione appaltante			
E	RIFERIMENTI CONTABILI			
29	Riferimenti alla deliberazione di approvazione del bilancio.	In assenza di delibera di bilancio indicare gli estremi di approvazione del bilancio pluriennale vigente.		
30	Riferimenti deliberazione approvazione PEG e del PIAO			
31	Impegno di spesa/prenotazione/copertura finanziaria	Indicare l'importo da impegnare e se lo stesso è assoggettato o meno all'iva ( relativa aliquota).  Nel caso di Bilancio e PEG non ancora approvati, indicare il rispetto dell'art. 163 del TUEL (esercizio provvisorio).  Qualora si tratti di impegni di spesa su più esercizi finanziari, fare riferimento agli impegni di spesa pluriennali.		1
32	Conformità dei pagamenti con le regole della finanza pubblica vigenti.	Dare atto nel provvedimento di impegno che il programma della spesa derivante dall'atto è compatibile con le vigenti regole della finanza pubblica.		
33	Contributo ANAC	(in caso di affidamenti di importo pari o superiore ad $\epsilon$ 40.000,00) di assumere l'impegno di spesa relativo al pagamento del contributo all'ANAC, dovuto in relazione al presente affidamento, e pari ad $\epsilon$ sul cap del bilancio 20, che presenta adeguata disponibilità		

F	DOCUMENTI RICHIAMATI E ALLEGATI			
34	Richiamati e/o allegati	Eventuali altri atti richiamati e/o allegati alla determinazione (disciplinare di gara, bando, schema di lettera di invito, schema di contratto, patto di integrità, altro).		1
G	PRESCRIZIONI ANTICORRUZIONE E TRASPARENZA			
35	Obblighi di pubblicità e trasparenza	Tutti gli atti della procedura di gara sono soggetti agli obblighi di trasparenza previsti dall'art. 29 del Codice dei contratti e dal D.Lgs. n. 33/2013 e ss.mm.ii		2
36	Pubblicazione atti all'Albo Pretorio Online	In ottemperanza al Regolamento comunale sul Controllo di Reg. Amministrativa (art. 12) e al Regolamento degli uffici e dei servizi (art. 20) le determinazioni devono essere pubblicate in elenco.		1
н	ASPETTI DI REGOLARITÀ FORMALE			
37	Acquisizione del visto di regolarità contabile ai sensi dell'art. 153 del D.Lgs. n. 267/2000	Dare atto che la determina sarà trasmessa al servizio finanziario per l'acquisizione del visto di regolarità contabile.		3
38	Sottoscrizione del Dirigente firmatario dell'atto e dove previsto del R.P. o RUP.			3
	TOTALI RISULTATI ESAME			



#### \*Riferimenti:

- D.Lgs. n. 267/2000 "Testo unico delle leggi sull'ordinamento degli enti locali " art. 191, co. 1);
- Legge n. 241/1990 "Nuove Norme in materia di procedimento amministrativo e di diritto di accesso ai documenti amministrativi";
- D.L. 6 luglio 2012 n. 95 convertito dalla legge 7 agosto 2012, n. 135 (art. 1) (spending-review);
- Art. 1, comma 450, della legge 27 Dicembre 2006, n. 296 e ss.mm.ii;
- L. n. 136/2010 e D.L. 187/10 Convertito in Legge N. 217 del 17/12/2010 Deliberazione AVCP n. 8 e 10/2010, e n. 4/2011 e ss.mm.ii;
- L. 190/2012 e s.m.i. (Legge Anticorruzione);
- D.Lgs. 33/2013, come modificato dal D.Lgs. n. 97/2016 (Decreto Trasparenza);
- L. R. 13 MARZO 2018 n. 8/2018 "Nuove norme in materia di contratti pubblici di lavori, servizi e forniture", e ss.mm.ii.;
- Linea guida FOIA ANAC Det. n. 1309 del 28/12/2016;
- Linea guida Trasparenza ANAC Det. n. 1310 del 28/12/2016;
- Comune di Olbia, Delibera di Giunta Comunale n. 260 del 06/07/2016 "Approvazione Patto d'Integrità";
- Piano Triennale di Prevenzione della Corruzione e della Trasparenza, vigente del Comune di Olbia.

#### Il campo ha tre valori:

- 1 lieve;
- 2 rilevante;
- 3 grave

## Appendix C

## JSON Checklists

### C.1 Template for JSON Checklists

#### **Key Explanations:**

- checklists (Array): The root element containing one or more checklist objects.
- Checklist Object (within checklists array): Represents a single complete checklist.
  - NomeChecklist (String): A unique name or identifier for this specific checklist (e.g., "Determine", "Contratti"). Used for selection.
  - breve (String): A very short, concise summary of what the checklist is for.
  - Descrizione (String): A more detailed description outlining the checklist's purpose, the context in which it's used, and criteria for when it should be applied to an administrative act. This is crucial for the LLM to automatically select the correct checklist.
  - Possibili Risposte (String): A string representation of a list defining the valid categorical answers the LLM should provide for each point (e.g., "SI", "NO", "NON PERTINENTE").
  - Note (String): An optional field for any general annotations or comments about the checklist itself.
  - Punti (Array): Contains an array of objects, where each object represents a single point or question within the checklist.
- Punto Object (within Punti array): Represents a single item to be verified.
  - Istruzioni (String): Provides specific instructions, context, or guidance on how to interpret and evaluate this particular checklist point against the administrative act.
  - Punto (String): The literal text of the checklist point or question as it appears in the original document.

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 Sezione (String): An optional field used if the original checklist is divided into named sections (e.g., "General Identifying Elements", "Normative References"). Helps maintain structure.

 num (String/Integer): The number or unique identifier associated with this specific checklist point. Used for referencing and matching with ground truth data.

Listing C.1 Template JSON for the checklists - Translated

```
1 {
2
     "checklists": [
3
        {
           "NomeChecklist": "checklist identification",
4
           "breve": "Very concise description of the
5
            checklist function",
           "Descrizione": "Short Description + **Purpose
6
            and Context** + **When to Apply**",
           "Possibili Risposte": "[\"YES\",\"NO\",\"NOT
            RELEVANT\"]",
           "Note": "Possible notes",
8
           "Punti": [
9
              {
10
                  "Istruzioni": "How to read the point of
11
                  the single checklist, adding the context
                  that is usually necessary to understand
                  it",
                  "Punto": "Point as reported on the
12
                  checklist",
13
                  "Sezione": "Section (if the checklist is
                  divided into multiple sections)",
                 "num": "<int> checklist number"
14
15
              }
16
           17
        }
     ]
18
19 }
```

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**Listing C.2** Template JSON for the checklists - Used

```
1 {
     "checklists": [
2
3
        {
           "NomeChecklist": "identificazione della
4
            checklist",
           "breve": "Descrizione molto sintetica della
5
            funzione della checklist",
           "Descrizione": "Descrizione Breve + **Scopo e
6
            Contesto** + **Quando Applicarla**",
           "Possibili Risposte": "[\"SI\",\"NO\",\"NON
7
            PERTINENTE\"]",
           "Note": "Possibili note",
8
           "Punti": [
9
              {
10
                  "Istruzioni": "Come leggere il punto
11
                   della singola checklist, aggiungendo il
                   contesto che di solito è necessario per
                   capirla",
12
                  "Punto": "Punto come riportato sulla
                   checklist",
                  "Sezione": "Sezione (se la checklist è
13
                   divisa in più sezioni)",
                  "num": "<int> numero della checklist"
14
15
16
           ]
17
18
     ]
19 }
```

#### C.2 Lucca Checklists

Listing C.3 Checklist of municipality of Lucca

```
1 {
2
     "checklists": [
3
4
             "NomeChecklist": "Determine"
             "breve": "Utilizzare la checklist **Determine** per verificare atti e
5
               provvedimenti amministrativi caratterizzati da strutture formali, riferimenti
               normativi generali e specifici, pianificazione delle attività e misure di
               controllo preventive.",
6
            "Descrizione": "Utilizzare la checklist **Determine** per verificare atti e
               provvedimenti amministrativi caratterizzati da strutture formali, riferimenti
               normativi generali e specifici, pianificazione delle attività e misure di
               controllo preventive.\n**Scopo e contesto**:\nQuesta checklist è concepita per
               la verifica delle determinazioni amministrative e atti interni. Essa si
               rivolge principalmente a quei provvedimenti che hanno una natura gestionale e
               di controllo, in cui è fondamentale assicurare la corretta strutturazione
               formale e la completezza dei riferimenti normativi e procedurali. È indicata
               per quei casi in cui la determina riguardi la definizione della competenza, la
```

C.2 Lucca Checklists

```
strutturazione dellatto e la connettività con strumenti di programmazione e
                audit interni (come il Piano di Auditing 2024).\n**Quando
                applicarla**: \nQuesta checklist è particolarmente indicata per le
                determinazioni che hanno come oggetto ladozione di atti formali e gestionali,
                in cui si deve garantire una completa conformità procedurale e normativa. Se
                la determina in esame richiede la validazione di atti amministrativi interni,
                con riferimento a responsabilità, competenze e misure preventive, allora è
                consigliabile applicare la checklist **Determine**.",
7
             "Punti": [
8
                 {
                     "Istruzioni": "Controlla se sono specificate le competenze degli organi",
9
10
                     "Punto": "Competenza organo/dirigente individuato con decreto",
11
                     "num": 1
12
13
14
                     "Istruzioni": "Controlla se è presente l'articolazione dell'atto",
15
                     "Punto": "Articolazione dellatto in intestazione preambolo/premessa, parte
                        motivazione, dispositivo, indicazione autorità e termini per ricorrere,
                        riferimenti al deposito nel fascicolo digitale degli atti afferenti il
                        procedimento amm.vo ex art. 41 CAD (gestione documentale)",
16
                     "num": 2
17
                 },
18
19
                     "Istruzioni": "Controlla se ci sono i riferimenti normativi di carattere
                        generale"
20
                     "Punto": "Affidabilità riferimenti normativi di carattere generale es.
                       TUEL ",
                     "num": 3
21
22
                 }.
23
24
                     "Istruzioni": "Controlla se sono presenti i riferimenti normativi
                        specifici"
25
                     "Punto": "Affidabilità riferimenti normativi specifici es. Codice dei
                       contratti, Regolamenti Ente",
                     "num": 4
26
27
                 },
28
                     "Istruzioni": "Controlla se sono presenti le attività",
29
30
                     "Punto": "Nel caso di attività inserite negli atti di programmazione
                        Coerenza con: \n- DUP e PIAO \n- Bilancio di Previsione se trattasi di
                        DD con spesa; \n- cronoprogramma in fase di esecuzione (lavori,
                        forniture, servizi \n- SITAT e altre banche dati)",
31
                     "num": 5
32
33
                     "Istruzioni": "Controlla se è indicata esplicitamente la motivazione",
34
35
                     "Punto": "Esplicitazione motivazione con puntuale indicazione presupposti
                        di fatto e ragioni giuridiche (riferimenti normativi e/o
                        regolamentari)",
36
                     "num": 6
37
38
39
                     "Istruzioni": "Controlla se sono presenti i seguenti punti:",
                     "Punto": "1) Responsabile del Procedimento ovvero distinzione tra
40
                        responsabile del procedimento e del provvedimento; se è la EQ
                        responsabile del provvedimento (delega di firma) indicare
                        lattribuzione/delega del Dirigente\n2) indicare RUP delegato per fase",
41
                     "num": 7
42
43
44
                     "Istruzioni": "Controlla se sono indicate le seguenti misure:",
                     "Punto": "Indicazione misure di prevenzione pertinenti rispetto allo
45
                        specifico provvedimento, ad es:\n- conflitto di interessi (per il PNRR
                        obbligatorio sempre chiedere la dichiarazione)\n- obblighi di
                        pubblicità ai sensi delle Delibere ANAC 2023 per contratti finiti o in
                        corso al 31.1.2023\n- obblighi di pubblicità ai sensi del Dlvo 36/2023,
```

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```
art. 28\nQualora il provvedimento sia funzionale al raggiungimento di
                        un obiettivo di performance, dare atto del rispetto delle misure di
                        protezione inserite nelle fasi di PIAO",
46
                     "num": 8
47
                 },
48
49
                     "Istruzioni": "Controlla se la normativa sulla tutela della riservatezza è
                       rispettata",
50
                     "Punto": "Rispetto normativa sulla tutela della riservatezza laddove
                       rilevante",
51
                     "num": 9
52
                 },
53
                     "Istruzioni": "Controlla se sono stati rispettati i tempi e termini del
54
55
                     "Punto": "Rispetto dei tempi e dei termini del procedimento",
56
                     "num": 10
57
                 },
58
59
                     "Istruzioni": "Sono presenti altre annotazioni Criticità?",
                     "Punto": "Altre annotazioni/criticità in merito: a. possibilità di
60
                        semplificare\nb. possibilità di digitalizzare\nc. fare un focus
                        specifico\nd. pari opportunità\ne. accesso",
61
                     "num": 11
62
                 }
             ]
63
64
65
66
              "NomeChecklist": "Contratti",
              "breve": "Applicare la checklist **Contratti** quando la determina ha una natura
67
                contrattuale, richiedendo il controllo dei criteri di selezione, le condizioni
                economiche e gestionali, e il rispetto degli obblighi normativi relativi alla
                trasparenza, privacy e piattaforme digitali.",
              "Descrizione": "Applicare la checklist **Contratti** quando la determina ha una
68
                natura contrattuale, richiedendo il controllo dei criteri di selezione, le
                condizioni economiche e gestionali, e il rispetto degli obblighi normativi
                relativi alla trasparenza, privacy e piattaforme digitali.\n**Scopo e
                \verb|contesto**\nLa| checklist **Contratti** \`e studiata per il controllo e la|
                verifica dei contratti pubblici, con particolare attenzione alle scritture
                private e lettere commerciali, come previsto nel Piano di Auditing 2024 per il
                primo semestre in materia di appalti e concessioni. È destinata a quelle
                determinate che riguardano l'affidamento e la gestione di contratti, dove la
                corretta applicazione dei criteri di selezione e il rispetto delle normative
                specifiche in tema di trasparenza, privacy e pubblicità sono elementi
                fondamentali.\n**Quando applicarla**:\nQuesta checklist si applica quando la
                determina riguarda la stipula, gestione o controllo di contratti pubblici. Se
                la proposta di determina include elementi contrattuali (identificazione del
                tipo di contratto, criteri di selezione, condizioni economiche,
                regolamentazioni di privacy e comportamentali, e luso di piattaforme di
                e-procurement), la checklist **Contratti** diventa lo strumento di riferimento
                per verificare la conformità e la completezza delle informazioni necessarie.",
69
              "Punti": [
70
                 {
                     "Istruzioni": "Controlla se è presente la specifica natura del contratto
71
                       nella determina. Controlla che ci siano gli estremi."
72
                     "Punto": "Natura del contratto: lettera commerciale, contratto",
73
                     "num": 1
74
75
                     "Istruzioni": "Controlla se sono presenti i riferimenti alla Determina
76
                       Dirigenziale",
77
                     "Punto": "Riferimenti alla DD di affidamento e alla normativa",
78
                     "num": 2
79
                 },
80
```

C.2 Lucca Checklists

```
81
                      "Istruzioni": "Controlla se sono presenti i criteri di selezione del
                         operatore economico",
                      "Punto": "CRITERIO di SELEZIONE operatore economico\n- Estremi o
 82
                         riferimento a gara (procedure aperte o ristrette)\n- Estremi o
                         riferimento ad affidamento diretto anche senza confronto tra differenti
                         preventivi, il comma 1 dellart. 50 sottolinea limportanza del possesso
                         di 'documentate esperienze pregresse idonee allesecuzione delle
                         prestazioni contrattuali'\nArt. 50, c. 1 Dlvo 36/2023 Regolamento UE
                         2495 del 15/11/2023 per le soglie comunitarie\n- importo stimato lavori
                         fino a 150.000 servizi forniture sino a 140.000 affidamento diretto\n-
                         da 150.000 a 1.000.000 procedura negoziata senza bando previa
                         consultazione 5 OE\n- procedura ordinaria per lavori di importo pari o
                         superiore a 1.000.000 e fino alle soglie di rilevanza europea\n-
                         inferiore a 5.000 senza principio di rotazione_",
 83
 84
                  },
 85
 86
                      "Istruzioni": "Controlla se i tempi di pagamento sono specificati",
                      "Punto": "Tempi di pagamento fatture (specificare se superiori a 30 giorni
 87
                         o fare riferimento ad atto richiamato)",
 88
                      "num": 5
                  },
 89
 90
91
                      "Istruzioni": "Controlla se i termini di conclusione della
                         prestaione/lavori sono nominati",
 92
                      "Punto": "Termini di conclusione della prestazione/lavori",
93
                      "num": 6
 94
 95
                      "Istruzioni": "Controlla se sono specificati i fondi",
 96
 97
                      "Punto": "Specificare se sono fondi soggetti a rendicontazione",
 98
                      "num": 7
99
100
                      "Istruzioni": "Controlla se si da atto che la normativa per la privacy è
101
                         rispettata",
102
                      "Punto": "Specificare la normativa sulla privacy per i dati personali",
                      "num": 8
103
104
105
106
                      "Istruzioni": "Controlla se il codice è richiamato",
107
                      "Punto": "Richiamato il codice di comportamento dei dipendenti ",
108
                      "num": 9
109
110
                      "Istruzioni": "Si da atto che la piattaforma di e-precurement è stata
111
                         utilizzata?",
112
                      "Punto": "Piattaforma di e-procurement: Start, Consip Mepa ai fini della
                         pubblicità su Banca Dati Nazionale/PCT ANAC ",
113
114
              1
115
116
       ]
117
118 }
```

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