AI System Compliance Checklist for EU AI Act

This compliance checklist is designed to ensure that our AI-driven traffic prediction system adheres to the legal requirements outlined in the EU AI Act, particularly focusing on the provisions applicable to high-risk AI systems as defined in Title III and Article 16.

By following this checklist, the team can systematically address the legal and regulatory requirements necessary for deploying a high-risk AI system in the European Union. This will not only help in ensuring compliance but also enhance the reliability and trustworthiness of the AI system among users and stakeholders.

General Compliance

- **Legal Framework Awareness**: Ensure all team members are aware of and understand the EU AI Act's requirements.
- **Regulatory Updates**: Regularly review and update knowledge on any changes to the AI regulations.

Data Quality and Management

- **Data Acquisition Compliance**: Verify that data collection methods comply with GDPR and EU AI Act requirements.
- **Data Accuracy and Integrity**: Ensure that data used for training and operating the AI is accurate, relevant, and updated.
- **Data Protection**: Implement and maintain strong data protection measures to secure personal and sensitive data.

Documentation and Traceability

- **System Documentation**: Maintain comprehensive documentation covering all aspects of AI development and deployment.
- **Data Traceability**: Ensure traceability of data sources, processing methods, and data usage.
- **Decision-making Documentation**: Keep detailed records of all decisions made by the AI system, with explanations for these decisions to ensure transparency and accountability.

Transparency

- **User Information**: Provide users with clear, accessible information on how the AI system functions, the data it uses, and its decision-making processes.
- **Disclosure of Limitations**: Clearly communicate the limitations of the AI system, including potential inaccuracies.

Monitoring and Reporting

- **Continuous Monitoring**: Establish a system for ongoing monitoring of AI performance to detect and correct issues proactively.
- **Performance Reporting**: Regularly report on the AI system's performance, including accuracy and reliability metrics.
- **Compliance Audits**: Conduct periodic audits to ensure ongoing compliance with all applicable laws and regulations.

Ethical Considerations

- **Bias Detection and Mitigation**: Regularly test the AI system for biases and take steps to mitigate any identified biases.
- **Ethical Impact Assessment**: Perform an ethical impact assessment periodically to evaluate the impact of the AI system on users and the public.

Legal Responsibility

- **Legal Liability**: Clarify legal liabilities associated with the AI system, particularly in cases of malfunction or erroneous predictions.
- **Incident Response Plan**: Develop a plan for responding to incidents or breaches involving the AI system.