Legal Compliance Mapping for the Tirana Public Transportation Mobile Application
Alignment of System Requirements with Albanian Laws and Regulations

Functional Requirements

- **Route planning (public bus routes)** – Regulated by the Road Transport Law (Ligj nr. 8308/1998
  "Për transportet rrugore", i përditësuar). This law requires that city bus routes ("linjat kryesore") follow prescribed itineraries with stops only at officially designate d stations.
  Implementing official route planning in the app ensures compliance by using the legal ly approved network of routes and stops.
- **Real-time tracking** – Subject to data protection and cyber-
  security rules. Tracking buses or user location involves personal or sensitive data, so i t must comply with the Personal Data Protection Law (Ligj nr. 9887/2008
  "Për mbrojtjen e të dhënave personale") and the new Cybersecurity Law (Ligj nr. 25/2024
  "Për sigurinë kibernetike"). These laws require that any collection or transmission of personal data
  (e.g. GPS locations) be lawful and secure, protecting privacy and system integrity.
- **Ticketing (electronic ticket sales)** – Governed by the E-Commerce Law (Ligj nr. 10128/2009
  "Për tregtinë elektronike"). This law sets rules for commercial transactions over infor mation society services, including electronic sales, and protects consumers' rights. In corporating secure e-ticket purchasing and providing legally required information (prices, seller identity, refund/complaint procedures) ensures the app's ticketing functi on complies with this law.
- **Account management
  & Authentication** – Covered by electronic signature and data laws. User registration and login (authentication) should align with the Electronic Signature Law (Ligj nr. 9880/2008
  "Për nënshkrimin elektronik"), ensuring digital identities are recognized by law. Man aging user accounts necessarily involves processing personal data, so it must also co mply with Ligj nr. 9887/2008
  (Personal Data Protection). This guarantees user identities are verified securely and p ersonal information (profiles, preferences) is handled lawfully.

Non-Functional Requirements

- **Security (cybersecurity)** – Mandated by the Cybersecurity Law (Ligj nr. 25/2024
  "Për sigurinë kibernetike"). This law imposes security measures on all public and priv ate entities that administer information infrastructures
  ("subjekte që administrojnë infrastruktura të informacionit"), to protect against attack s that could impact public welfare or the economy. Applying strong encryption, secur e authentication, and incident-
  reporting procedures in the app helps fulfill these legal obligations for information se curity.
- **Accessibility** – Required by the Disability Rights Law (Ligj nr. 93/2014
  "Për përfshirjen dhe aksesueshmërinë e personave me aftësi të kufizuara"). That law guarantees the rights of persons with disabilities, including access to services on equa

l terms
("aksesueshmërinë e personave me aftësi të kufizuara"). Ensuring the app's UI is acce
ssible
(e.g. compatible with screen readers, clear layouts, language options) supports compli
ance with the mandate to provide equal access for all citizens.

- **Performance
& Availability** – Governed by public service quality standards. Council of Ministers
Decision nr. 525/2021
(approving the Ministerial responsibility for service standards) and related e-
government regulations require that public electronic services meet defined quality an
d uptime criteria. Designing the app for high performance and 24/7 availability aligns
with these standards, ensuring citizens reliably receive transport information when ne
eded. (For example, the e-Albania portal rules and service-
level protocols reflect these obligations.)

Domain Requirements

- **Tirana street layout and maps** – Informed by Territorial Planning Law
(Ligj nr. 107/2014
"Për planifikimin dhe zhvillimin e territorit"). That law requires municipal planning a
nd up-to-
date cadastral data for urban areas. Using official maps and approved street data
(in line with national planning databases) ensures the app respects the legally maintai
ned street network.
- **Informal stops (non-
designated stops)** – Prohibited by transport regulations. As noted above, Ligj nr. 830
8/1998 specifies that buses on primary city routes stop only at prescribed stations
The app must not suggest or validate off-route
"informal" boarding points. Including only official stops in the route planner enforces
the legal requirement that transport follows approved schedules.
- **Regional payment practices** – Regulated by financial laws and Bank of Albania rule
s. While no single law dictates ticket payment modes, any electronic payment process
ing must comply with the Law on Payment Services (Ligj nr. 102/2014
"Për shërbimet e pagesës dhe infrastrukturën e pagesave"
(amended)), as well as Bank of Albania regulations for payment service providers. Us
ing nationally compliant payment gateways
(e.g. those licensed by the Bank of Albania) ensures ticket payments follow the prescr
ibed financial framework.

User Requirements

- **Journey planning
& personalization** – Tied to data protection. When users plan routes or set personal p
references, the app collects data about origins, destinations, and habits. Processing thi
s information must comply with Ligj nr. 9887/2008
(Personal Data Protection). Providing opt-
in consent and transparent privacy notices ensures that personalized journey features
operate within legal privacy standards.
- **Ticket purchasing** – Subject to consumer protection rules in e-commerce law
(Ligj nr. 10128/2009). The app's ticket purchase flow should provide users with all le
gally required information

(e.g. terms of sale, refund policy, supplier identification). Ensuring secure transaction handling (e.g. PCI-
compliant card processing under Bank of Albania oversight) supports compliance with both the e-commerce and payment-services laws.

System Requirements

- **Route engine
  & schedule database** – Must reflect official public transport network. Under Ligj nr. 8308/1998, the Ministry of Infrastructure
  (and Tirana municipality) approve bus route networks and schedules. The app's routing engine should be based on these official datasets. This fulfills the law's intent by using the sanctioned
  "rrjeti i linjave" in journey calculations, avoiding conflicts with legally defined transport lines.
- **Payment processing** – Requires secure, legally compliant implementation. All payment processing must use licensed financial service providers
  (in line with Bank of Albania regulations) and apply strong security
  (per Ligj nr. 25/2024 on cyber-
  security). This ensures the system meets legal requirements for financial data protection and transaction integrity.
- **Tracking system** – Governed by data and safety laws. Vehicle tracking hardware must meet Road Authority standards
  (e.g. tachograph/GPS regulations in Ligj nr. 8308/1998) and any personal tracking
  (e.g. tracking a user's bus arrival) must comply with Ligj nr. 9887/2008
  (user consent and data security). Likewise, software monitoring (for real-
  time location) should follow Ligj nr. 25/2024 on cybersecurity to prevent misuse.
- **Authentication** – Must use legally recognized methods. Integrating national e-
  identification (e-
  Albania Login or qualified electronic signature under Ligj nr. 9880/2008) ensures user identities are verified by a framework accepted in law. This provides users with secure, government-
  backed login options and satisfies legal requirements for electronic identification in public services.