

Economic and Social Commission for Western Asia

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Requirements for Adopting and Deploying the AIRSO MAHDAR Mobile Application at the National Level

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Outline:

- Objectives of Deployment
- Shift to National Deployment Approach
- Key Requirements for Countries Testing AIRSO MAHDAR
- System Development
- Technical Requirements
- Pilot Phase Activities and Capacity Building

Objectives of Deployment

- Improve road traffic crash data collection
- Enhance data accuracy, timeliness, and harmonization
- Improve coordination across agencies (Police, Health, Transport)
- Strengthen national road safety observatories
- Support evidence-based road safety policies, strategies, and action plans

Shift to National Deployment Approach

- **Original Plan:** Deployment of the application on a regional platform during the pilot phase.
- **Revised Approach:** Deployment on national platforms in 3 pilot countries.
- **Reasons for the Shift:**
 - ✓ Improved compliance with local regulations
 - ✓ Enhanced data security and national ownership
 - ✓ Tailored customization to meet country-specific legal and technical requirements
 - ✓ Alignment with national data governance and management preferences

Key Requirements for Countries Testing AIRSO MAHDAR

- **Beneficiary Government(s) Endorsement:** letter of support from the relevant national counterpart(s) to be received by the secretariat by the end June 2025
- Connecting ESCWA with the **relevant national entity** responsible for hosting the application.
- Hosting Entity Responsibilities:
 - Provide a domain name
 - Configure SSL certificates
 - Oversee deployment in coordination with ESCWA (July 2025)

System Development

- Server: Python / Django REST Framework
- System Components & Technologies
 - Front-end: Typescript / Angular
 - Android client: Kotlin
 - Codebase: GitHub Repository (http://github.com/alien9/driver_django)
- Setup instructions in README for client & server

Technical Requirements

- Handheld devices (smartphones or tablets) for field data collectors
- Internet connectivity for real-time sync (or offline capabilities with later sync)
- Secure server hosting:
 - Option 1: National server infrastructure
 - Option 2: Cloud hosting (e.g., AWS, Azure)
- Integration with existing national systems (e.g., vehicle registration systems, hospitals) **(optional)**

Technical Requirements

- PostgreSQL (Version 16) relational database server with backup policy
- **Linux server** (recommended cloud environment) to run:
 - Django app (main server)
 - Celery (background tasks)
 - Mapserver (to render crash maps)
 - Redis (cache server)

Pilot Phase Activities and Capacity Building

- Train police trainers on data recording, transfer, and storage
- Conduct 3-month field testing in August, September, and October
- Collect feedback from pilot countries and implement modification requests
- Train police trainers on data processing and validation
- Train users on analyzing data for decision-making
- Use data to identify risks, set priorities, and track performance



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Thank You.

Any Questions?