

Weigh In Motion (WIM) Interfacing With TC-AIMS II and AALPS

Currently the Army manually identifies the vehicles and enters this information into the joint Transportation Coordinators' Automated Information for Movement System II (TC-AIMS II). The Army also weighs vehicles, manually calculates vehicle individual axle weights, total vehicular weight and manually measures the length of the vehicle. They then calculate the center of balance data and manually mark this information on the vehicle. This information is then manually transferred to the Automated Air Load Planning System (AALPS) personnel who manually enter it into the AALPS system. Each of these steps in the process is prone to human error.

By establishing (1) an automated data exchange between the vehicle Radio Frequency Identification (RFID) tags and WIM; and (2) an automated data exchange link between WIM and TC-AIMS II/AALPS, identification planning data can be automatically transferred from TC-AIMS II to WIM and “actual” weight data from WIM to AALPS thus eliminating those human errors and at the same time expediting the process.

Critical to the establishment of this data exchange is the modeling, design, and implementation efforts that are documenting the data/information process flow through the system. This project incorporates Key Use Cases, Activity Diagrams, Sequence Diagrams and Collaboration Diagrams capturing the data/information flows.

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