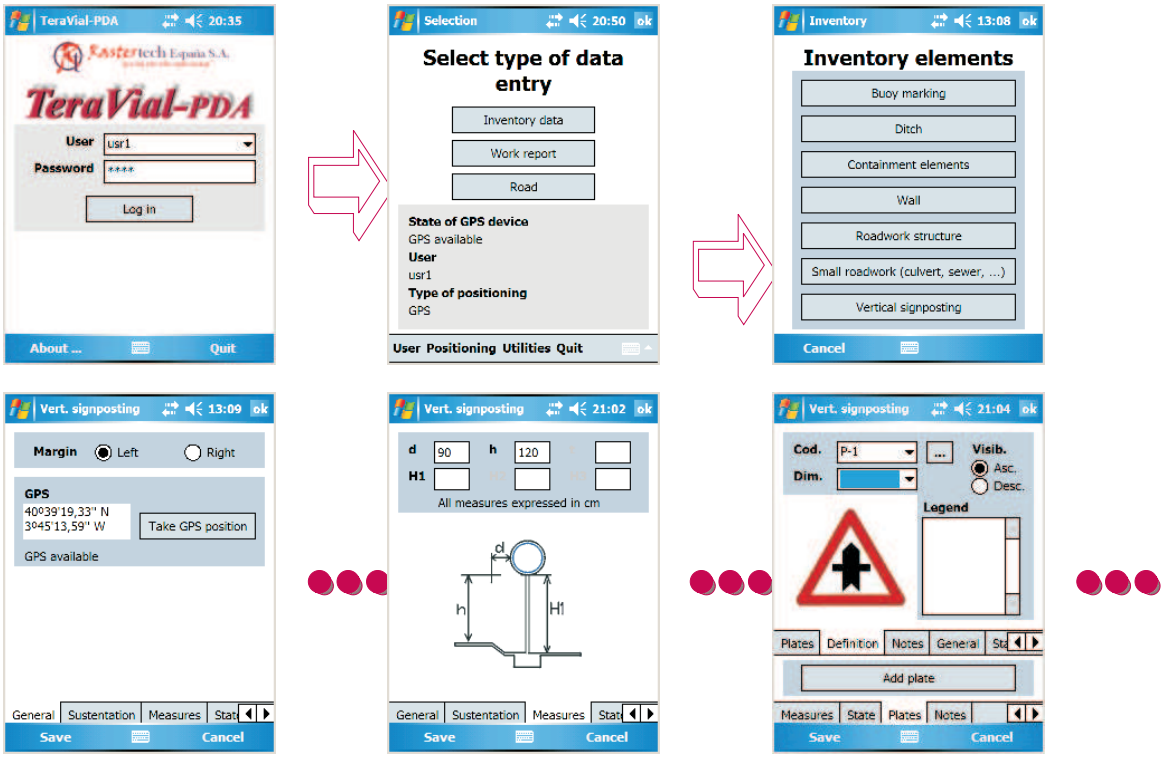
ROAD INFRASTUCTURE MAINTENANCE with TeraVial-PDA

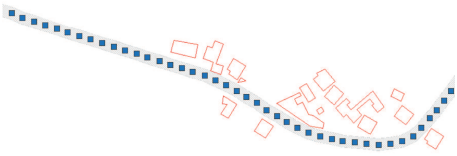
***TeraVial-PDA*, is an electronic field notebook used to capture in the field data relevant to the Maintenance of the Fundamental Road Infrastructure.**

One of the most recent contributions to the Management System for the Fundamental Road Infrastructure Maintenance ***TeraVial-4***, has been the creation of a powerful software for "Pocket PC" or PDA, equipped with a précise GPS (Global Positioning System) that allows users to directly capture in the field information related to work Reports, as well as inventory of elements of the road. The captured information can be downloaded afterwards automatically during a synchronised process in the main computer that contains the ***TeraVial-4*** Database.

Example of environement for inventory of Vertical Signposting



TeraVial-PDA will also allow the capture of positions of UTM with GPS in continuous mode from a vehicle, so in a very easy way you could update the road layout axis (one vertex each 10 m) after new road developments that would modify that layout.



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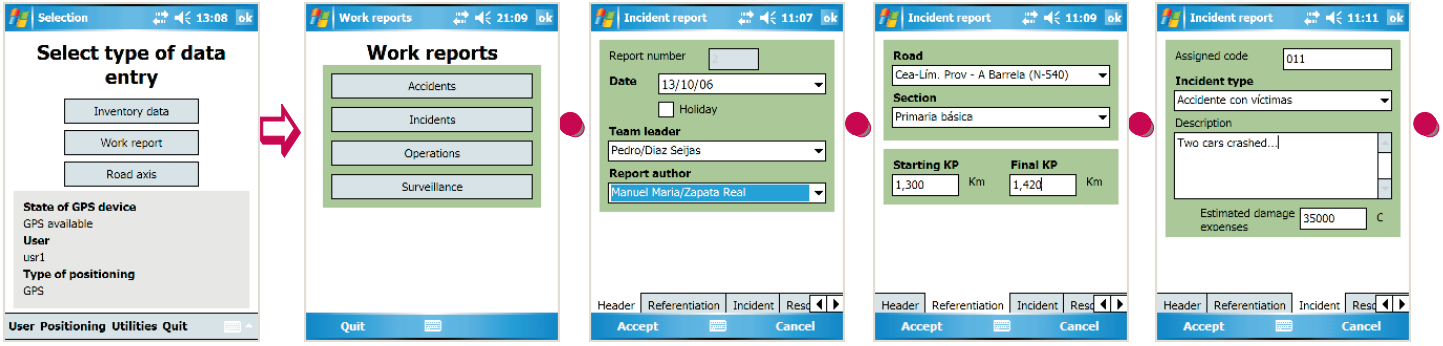
Using ***TeraVial-PDA*** will provide you with many advantages such as reducing time and improving accuracy by allowing you determine the positioning of the work areas, incidents, accidents, etc. or the road elements in the Inventory with UTM coordinates through the GPS device.
It reduces time because ***TeraVial-PDA*** becomes the perfect field notebook, reducing drastically the introduction of data manually in the main computer afterwards in the **Center of Operations**. This is also because avoids the visual determination of the road's positioning through the kilometre stone.
Accuracy because ***TeraVial-PDA*** determines instantly the positioning through UTM coordinates that subsequently ***TeraVial-4*** converts in the equivalent kilometric points.

Example of environement for creation of Incident Report



TeraVial-PDA Components

Pocket Computer hp iPAQ hx2410

- Processor: Intel a 400 MHz based on Xscale technology.
- Memory: 64 MB SDRAM.
- Display: TFT 16 bits colour(65.536 colours), 3.5"inch and resolution of 240x320 pixels.
- Ports E/S: Connection USB for synchronising with the PC.
- Slots for SD cards, SDIO, MMC; and for Compact Flash cards type I and II

GPS Bluetooth Fortuna Slim

- 12 parallel channels for tracking satellites.
- Communicating with the PDA through Bluetooth at 38.400bps.
- GPS Accuisition 10 meters.

Software TeraVial-PDA

- Access to the restricted application to identified users with password.
- Keeps the same data structure than ***TeraVial-4.***
- Strict control of the data entry.
- The typified data is obtained from the dropdown lists.
- Automatic synchronisation with the ***TeraVial-4*** Database through USB port.
- Optional positioning mode, by Kilometric Point or by Geographic coordinates.
- Capture of GPS positioning in continuous for restitution of the current road axis.
- Capture of inventory elements and work reports.

Inventory of Elements

Bouy marking
Ditch
Containment elements
Roadwork structure
Small Roadwork (culvert, sewer, etc...)
Vertical signposting

Work Reports

Accidents
Incidents
Operations
Surveillance

TeraVial-PDA is completely protected and provides you with total security against impact, water and dust resistant. Accessory of great utility for the easy use right next to the road