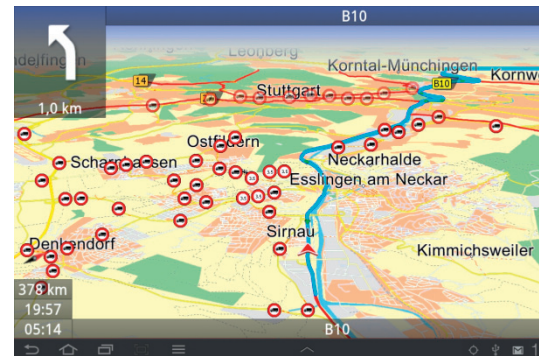


PTV NAVIGATOR FOR ANDROID (X3)

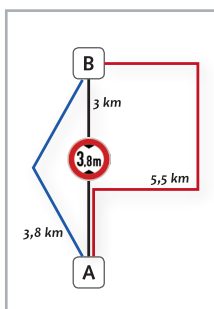
TRUCK NAVIGATION:

SAVES TIME AND MONEY!

PTV Navigator for Android is the professional truck navigation software for smartphones and tablets based on Android. It calculates truck-specific routes, taking into account truck attributes such as clearance heights or truck blocks, avoids local detours and provides warnings near dangerous zones. This saves time and money.



TRUCK RESTRICTIONS, DANGER WARNINGS, ADDITIONAL INFORMATION



The truck-specific attributes of the PTV Navigator are stored in the map data:

- ▶ General road closures with regard to truck specific restrictions such as

- weight, axle load, vehicle length, vehicle clearance heights and widths
- ▶ Roads closed for hazardous goods, water-pollutants, explosive substances and trailers (dependent on map data)
- ▶ The truck's vehicle profile (height, width, weight, axle load, hazardous goods etc.) can be set on the end device at any time. In this way, the navigation system always takes the relevant road closures or other information (e.g. empty run or full load) into account.

- ▶ Danger warnings before sharp turns, steep inclines, uneven roads or side winds (dependent on map data).
- ▶ ADR restriction codes are displayed on the map for tunnels.
- ▶ Avoidance of tunnels with specific ADR restriction codes (A-E) during navigation
- ▶ Display of roll-on/roll-off terminals and RoLa ("rolling road") terminals

TRUCK-SPECIFIC ROUTING

Truck drivers have high demands for optimal route planning. If these are not automatically accommodated, the user has a large number of setting and selection possibilities:

- ▶ The PTV Navigator route planning automatically avoids residential areas. The truck enters the residential area at the very last moment before reaching its destination.
- ▶ The driver decides the extent to

which narrow side roads and driving through cities is avoided. Different routing profiles can be selected for this purpose.

- ▶ Turning manoeuvres on roads with roadways that are not separated are avoided.
- ▶ PTV Navigator is able to recognise when the destination and start addresses are located in areas of blocked access, e.g. pedestrian zones or factory grounds. In these cases you are also safely guided to your destination.

BASIC FUNCTIONS

- ▶ Precise visual cues and spoken instructions
- ▶ 2D and 3D navigation using clear, intuitive maps
- ▶ Proven professional routing and navigation
- ▶ Extrapolated positioning in tunnels

- ▶ The following languages are supported by PTV Navigator: German, English, French, Dutch, Italian, Spanish.
- ▶ Auto Smartzoom provides optimum map information when approaching manoeuvres
- ▶ Incorporates directional information on highway signs
- ▶ Automatically switches between day and night view
- ▶ Displays speed and warnings
- ▶ Optional radar warnings



- ▶ Supported by Text2Speech, enabling road names to be spoken
- ▶ Numbered motorway exits
- ▶ Realistic motorway signs and junction views

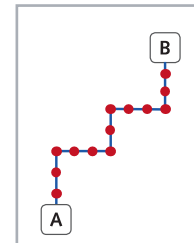


CONNECTED NAVIGATION

The planner can control the navigation of a truck from his desk. An API establishes communication between the navigation system and other Android applications on the end device. This enables orders arriving at the control centre to be directly transferred to the navigation system. These functions are used to:

- ▶ Send stop-off points as addresses from the control centre to the navigation system.
- ▶ Retrieve GPS positions from the navigation system and share them with third-party applications.
- ▶ Retrieve information from the navigation system.
- ▶ Automatically geocode addresses.

GUIDED NAVIGATION

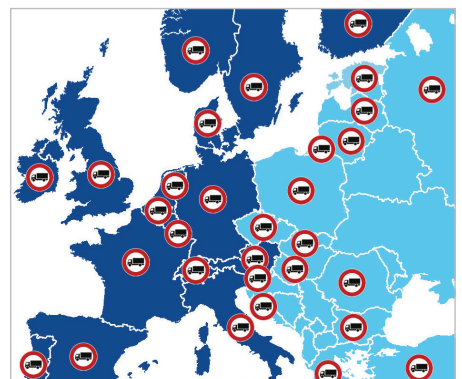


Transfer of complete routes to the navigation system (API). Even off-road routes, which are not included in the map materials, can be used in the navigation.

AVAILABLE MAPS

- ▶ Individual country from
- ▶ Europe map package Europe
- ▶ Arab countries city map package
- ▶ More available upon request

AVAILABLE ROAD DETAIL



Available road detail:

- Detailed network (complete coverage)
- Major roads and better

Available truck attributes:

- 🚛 Countries with truck attributes (NAVTEQ and TomTom in total)