



Nomadic Device Use Cases & User Requirements

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Nomadic Device trends

Wireless connectivity

GSM GPRS 3G

INTEGRATED

DIGITAL RADIO

LAPTOPS AND



Hybrid

PDA + storage

UNDOING
- HAND USE

ment Centre

Price



The PDA on wheels is now available

Capacity

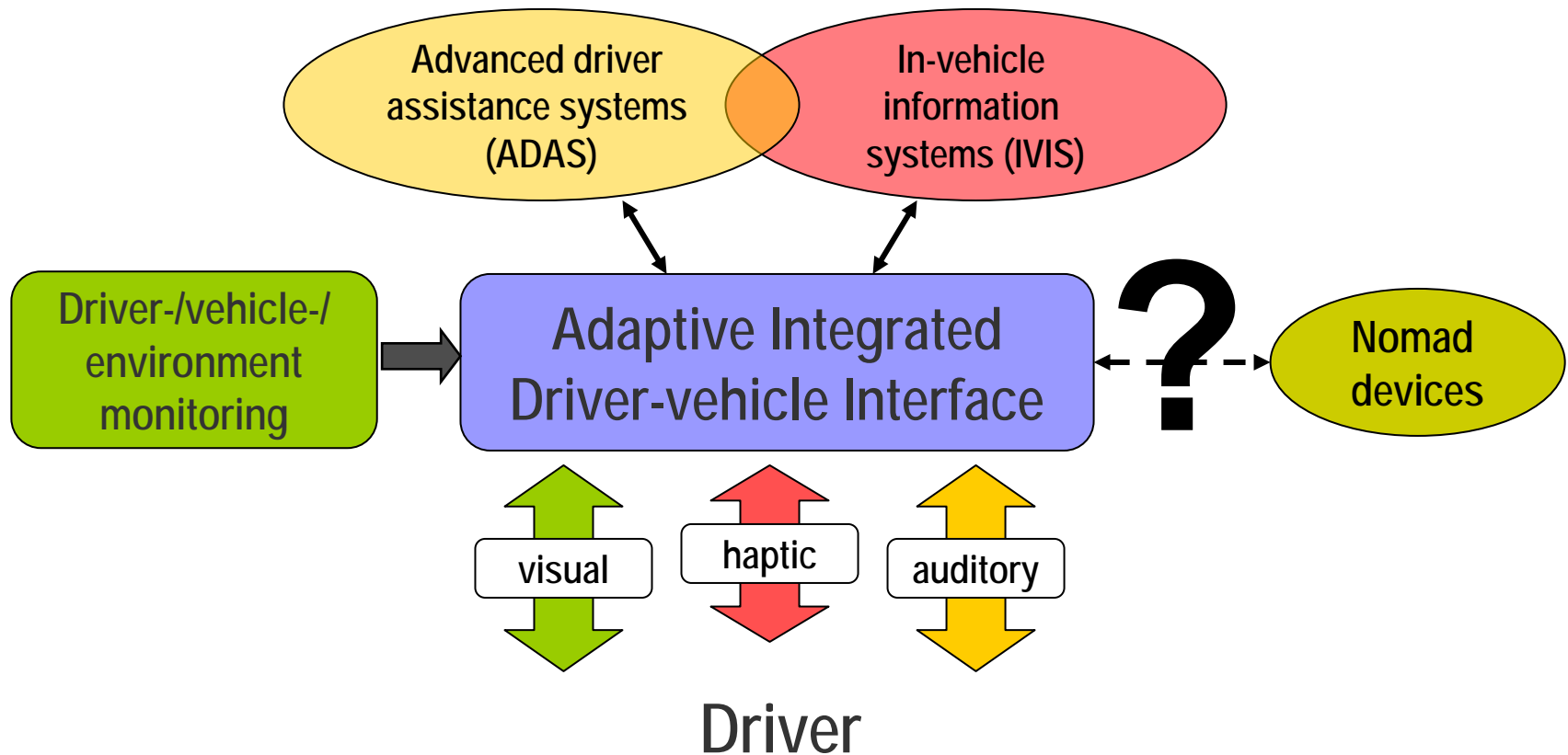


Power & functionality



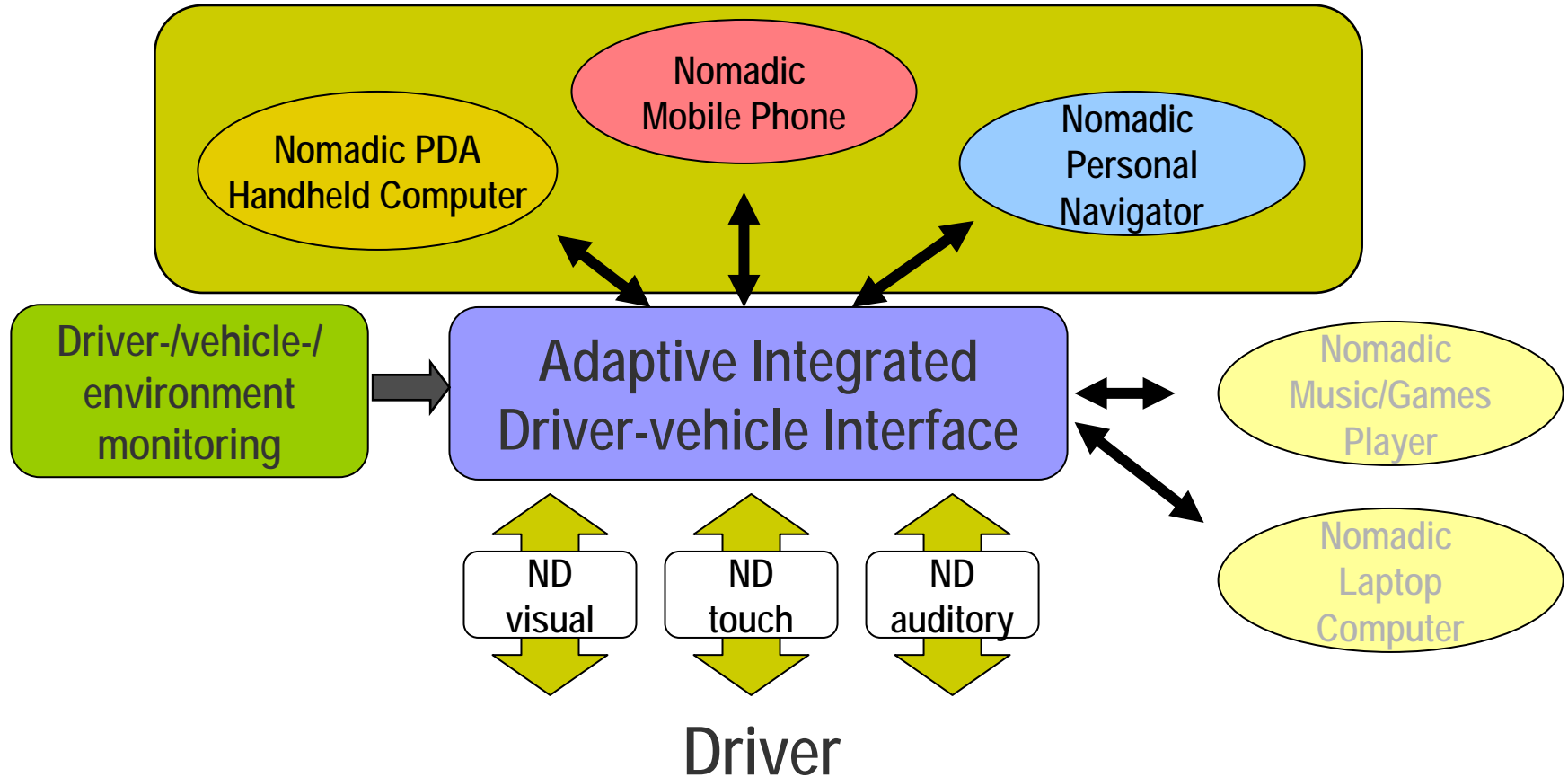


How to integrate Nomadic Devices in AIDE solution?



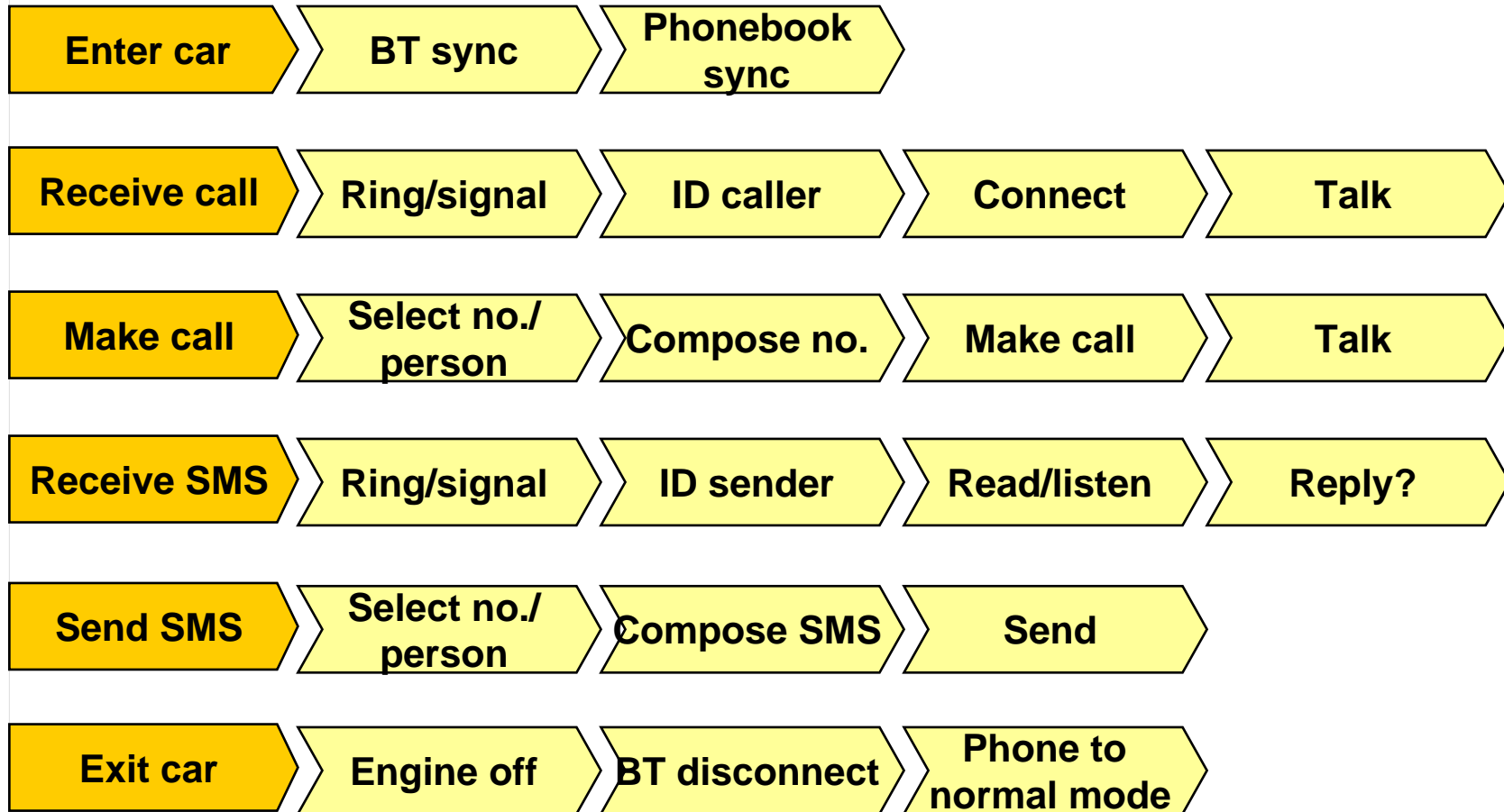


Nomadic device use cases in AIDE



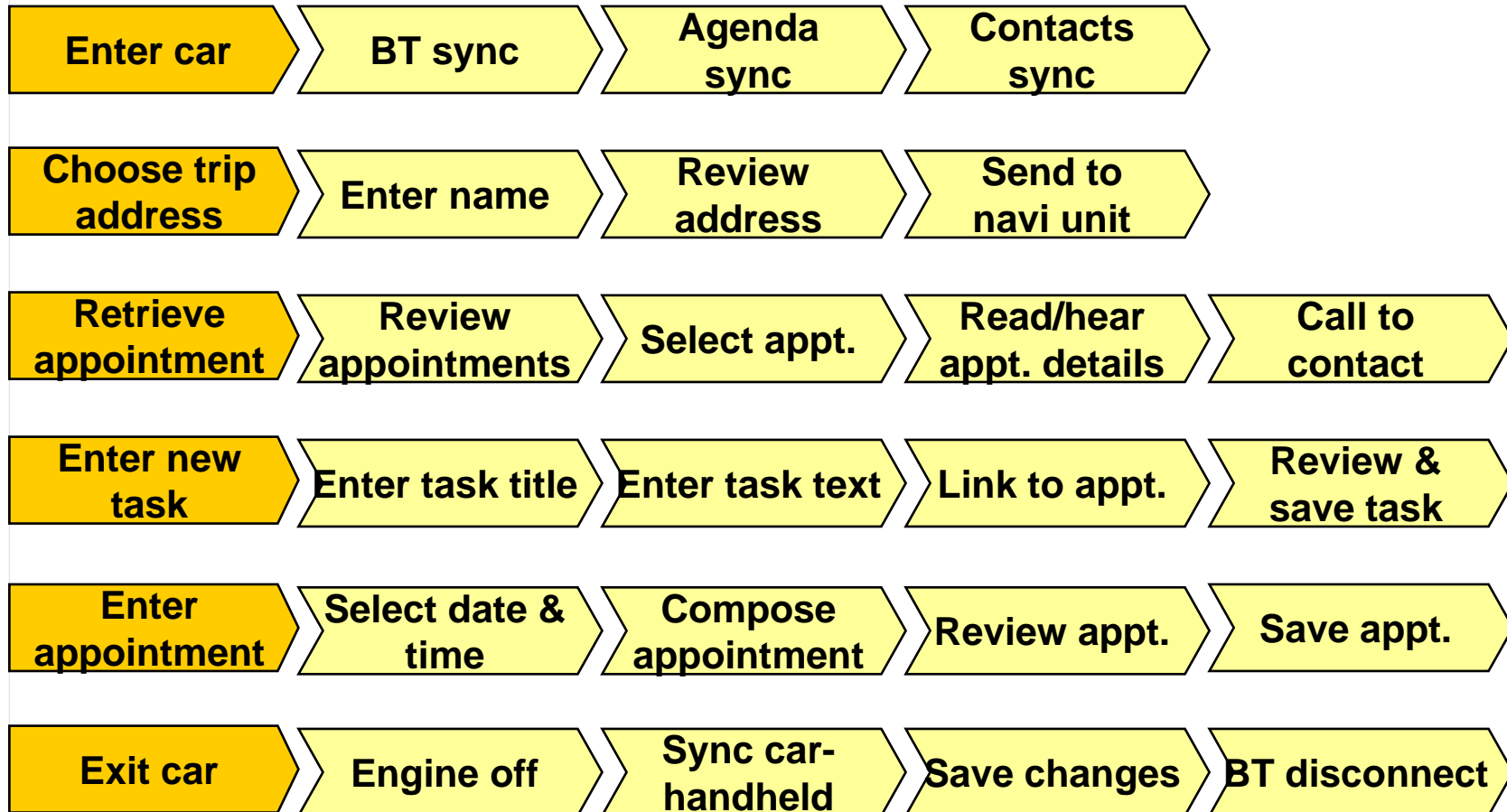


Use cases - Mobile Phone



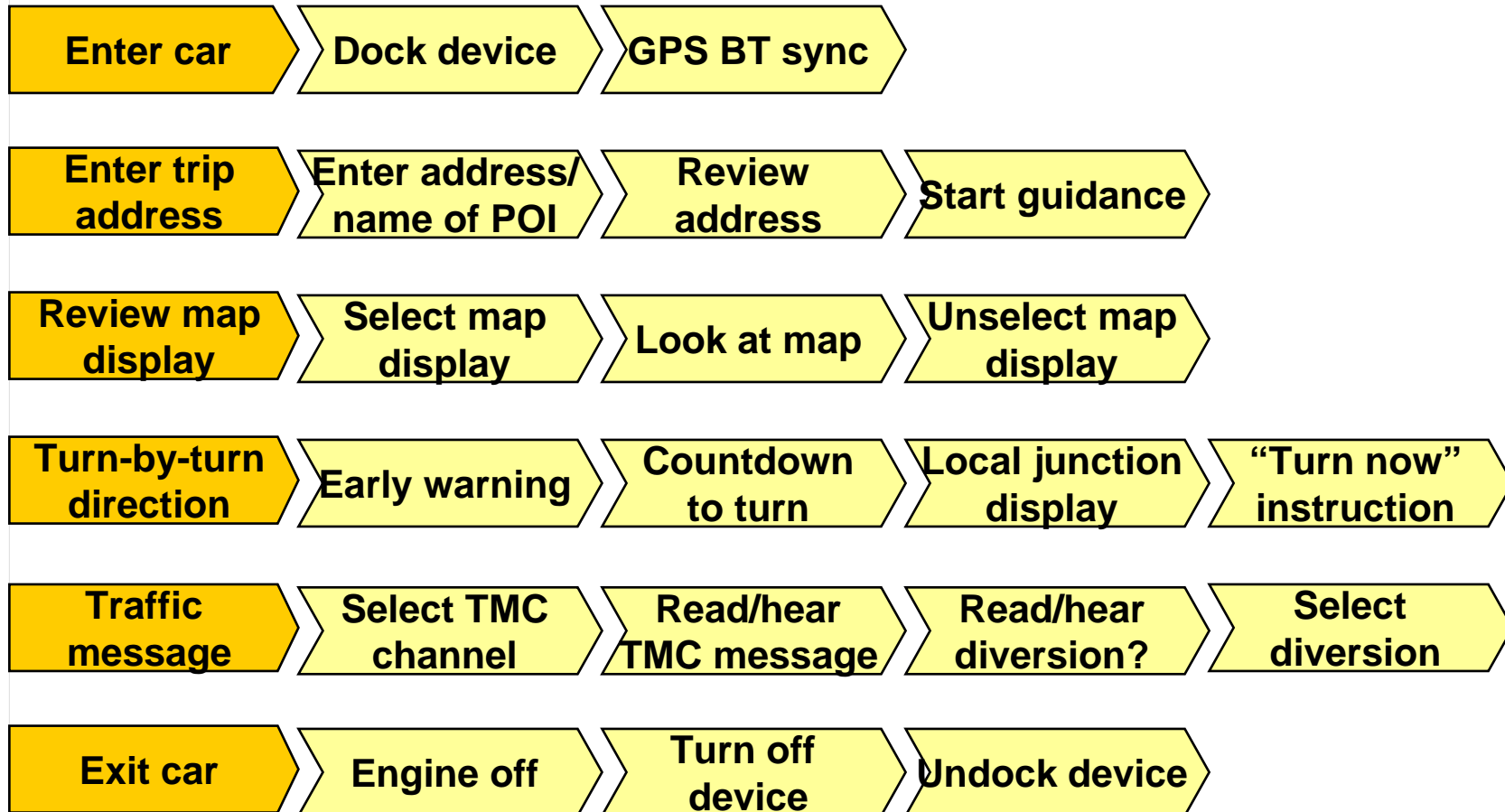


Use cases - Handheld PC/PDA





Use cases - Personal Navigator





Summary - use cases

- Nomadic devices (“NDs”) - substantial interaction with driver
- NDs need text-to-speech and speech recognition functionality
- NDs want access to onboard channels for audio, display etc.
- NDs need physical connectivity for power, link to GPS etc.
- NDs need fixation in suitable location for safe driver use



User needs - Driver

Use mobile phone for incoming & outgoing calls

- conveniently & easily
- safely & without distractions
- legally - must be “handsfree”

Use PDA for office productivity & personal computing

- manage calendar/appointments
- access address book, use for phone calls, SMS

Use personal navigator for route guidance & map display

- turn-by-turn route guidance, voice instructions, map display
- portable from one vehicle to another
- easy map upload & update



User needs - Vehicle industry ...are they defined?

Alternatives:

Adapt to customers' requirements

- ...mobile phone integration (...but not "carphone" ...)
- ...navigation device integration

or

Market Nomadic Device products to create customer demand

- ...off-board navigation service + portable device integration
- ...music/entertainment device integration



Requirements for a solution

- ➔ Allow vehicle manufacturers to control nomadic device integration in the car...
...while giving nomadic devices a way in via an optimised “gateway”
- ➔ Provide convenient interface between ND & onboard systems/devices
- ➔ Ensure safe integration & use of ND when in the vehicle
- ➔ Manage ND requests for onboard I/O access
 - e.g. allow, deny, divert, reschedule, postpone...
- ➔ Allow user/customer choice & preferences