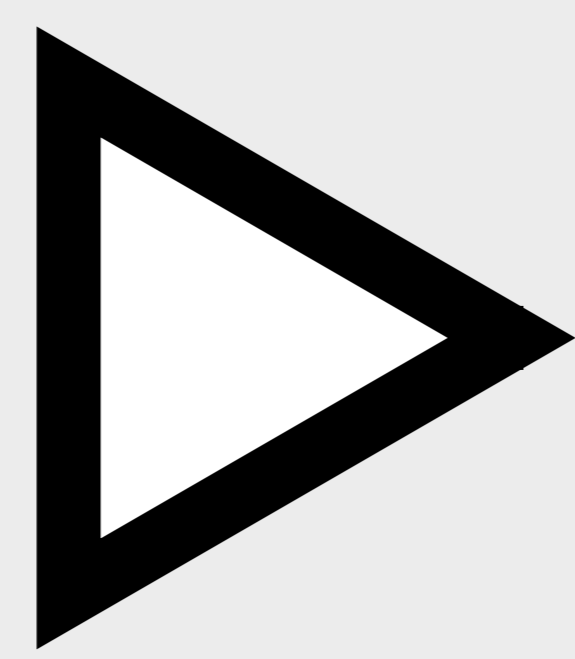


# CONTEXT-AWARE PRIORITIZATION OF INFORMATION: AN ARCHITECTURE FOR REAL-TIME IN-VEHICLE INFORMATION MANAGEMENT

Arjan Stoter, Simon Dalmolen, Erik Cornelisse

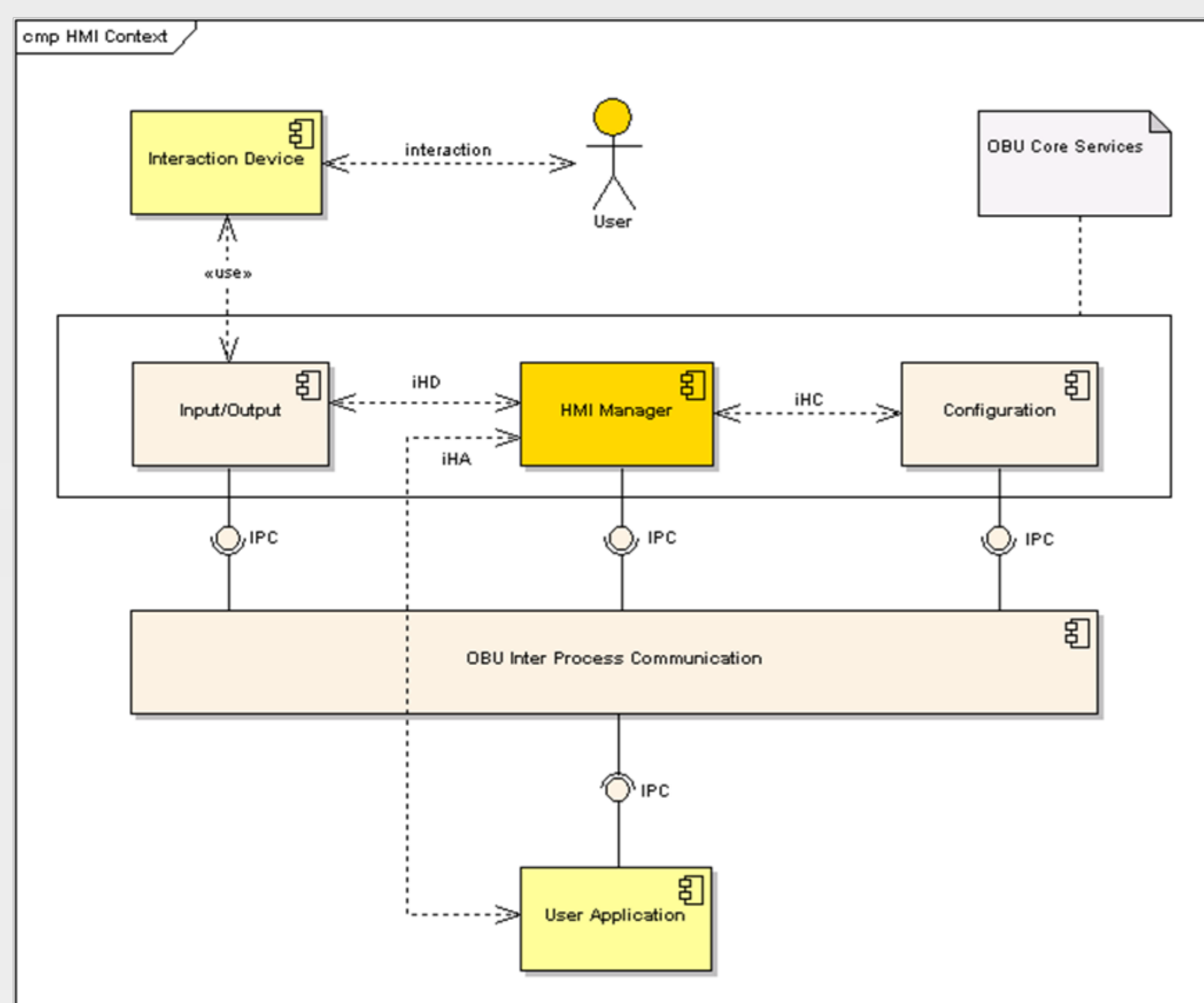


ADAS / ATIS ++



## In-vehicle information management

*Provide a driver-centred unified approach for in-vehicle information management.*



## HMI manager

- Onboard Unit (OBU) has a modular system architecture.
- The HMI-manager is a core service of the OBU.
- HMI-manager coordinates the information flow between the user and the applications.

## Prioritization of information elements

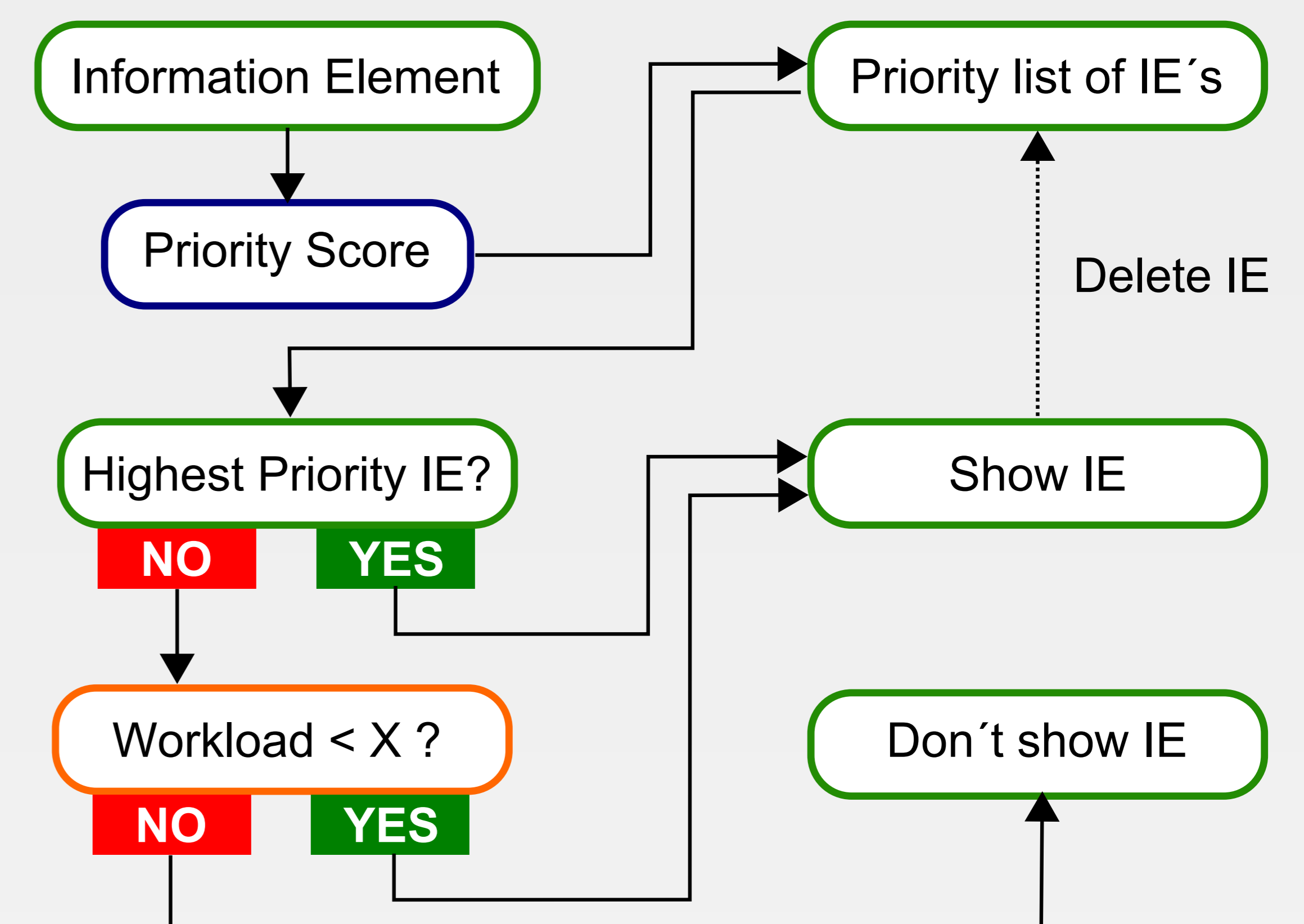
Priority	Urgent	Not urgent
Important	1	3
Not important	2	4

**Urgency:** temporal nature of information elements

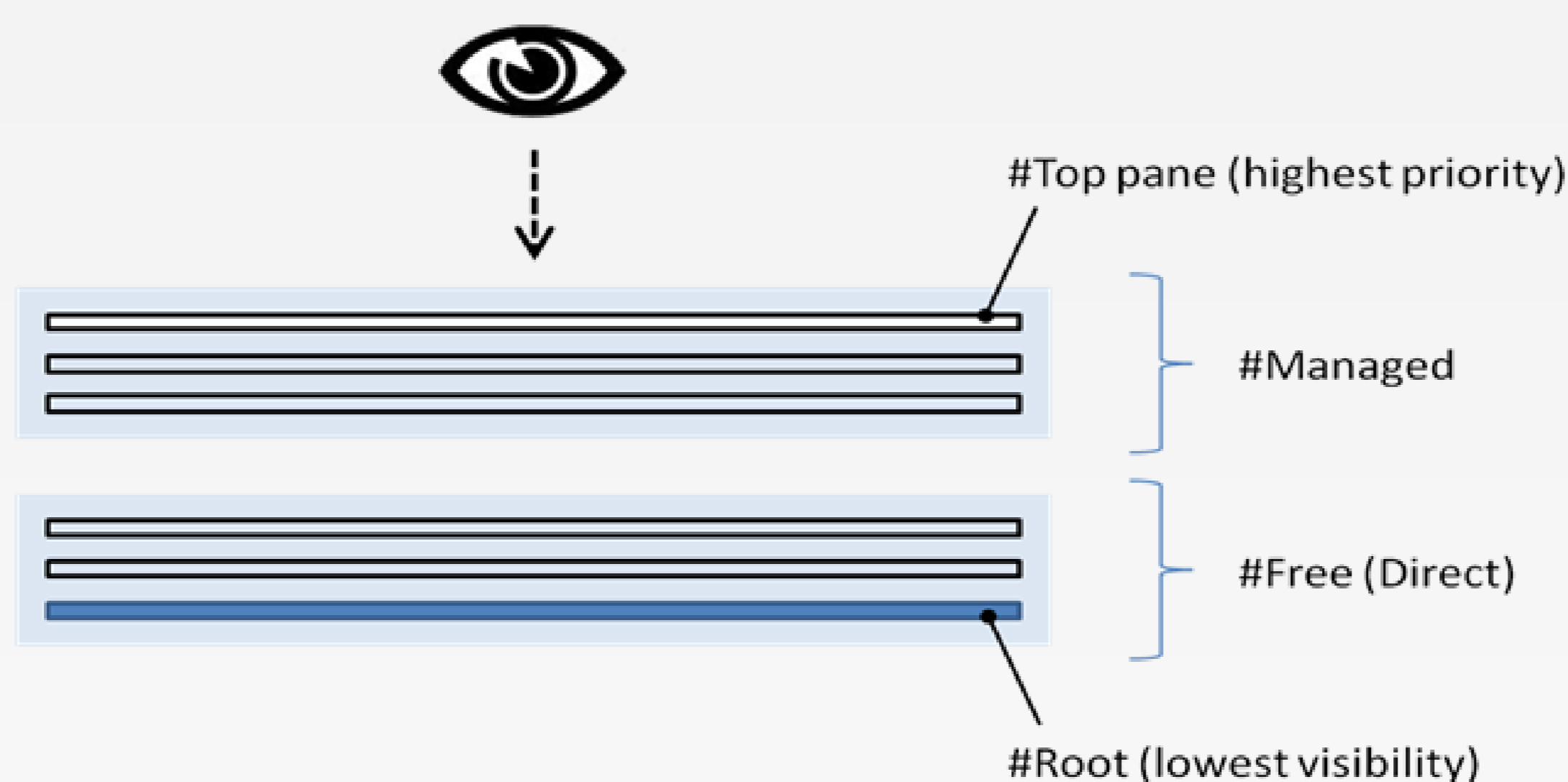
**Importance:** deduced from *event-type*

## Driver workload and context states

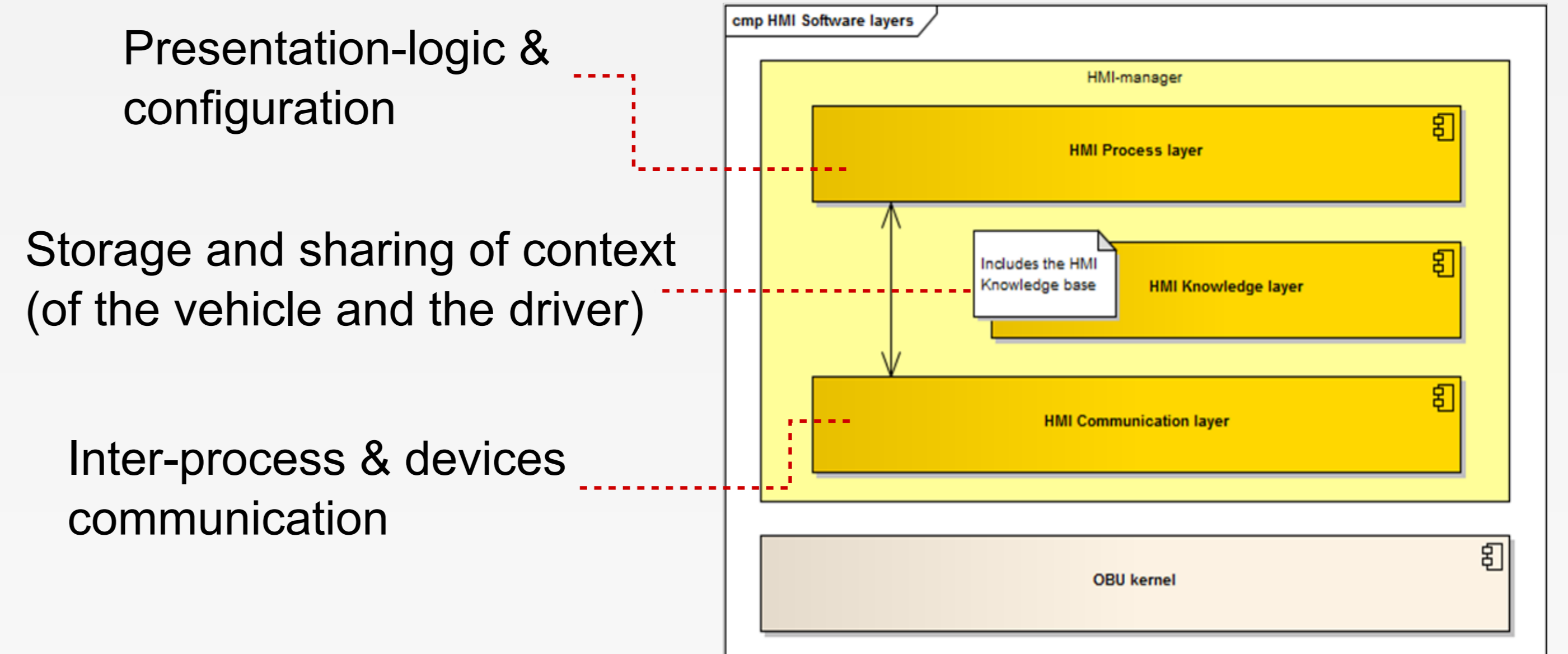
- A – Alerts:** only urgent and important.
- H – High attention:** only urgent.
- N – Normal situation:** presented by priority.
- L – Low concentration:** no prioritisation.



## Impact on user interaction



## Impact on applications



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