Conceptual view   
  
To transform the customer key drivers to an actual realization of an ALC system, the CAFCR method is used. The CAFCR framework consists of five different views that include: customer view, application view, functional view, conceptual view and realization view. The customer view deals with the desires of the customer in terms of key drivers. The application view describes the needs of the customer in terms of how the customer would like to realize his goals. These two views provide the justification for the design of the system in the other three phases. The functional view describes the what of the system and shows what the system should do. How this functionality is realized is explained in the conceptual and realization views. The CAFCR method is key to transform the customer’s objectives to a list of requirements that ensure a good system design.

# Customer view

The stakeholders of the project are NXP and Gijs Dubbelman, each having different objectives. NXP is mainly interested in an operational ALC system. On the contrary, Gijs is interested in the functional safety and possibilities of the current hardware architecture that is implemented on the test vehicle. The combined customer objectives are listed in Fig. \ref{CA} and are ranked as performance (top-to-bottom). These can be divided in: safety, comfort maintainability and user friendly. The maintainability originates from the desire to improve the ALC in the future.

# Application view

The customers objectives are further clarified in the application view, which are again shown in Fig. \ref{CA}. The application view also deals with the demands from other users, which are in this case the regulation, driver, car manufacturer and dealer. For now, the car manufacturer and dealer are assumed to be out of scope, since they do not impose strict functional requirements to the system yet. Two examples regarding the application view are explained next. First of all, to ensure safety, the system should be robust, designed in compliance with the standards and the sensor measurements should be reliable. Secondly, driver comfort can be ensured by reducing the workload of the driver, ensure smooth operation and feedback the ALC operating status back to the driver.

