Eclipse (Mo)bility (Ec)oSystem

Dirk Bangel, Indrasen Raghupatruni
Systems Engineering BBM Technical Strategies and Enabling, Robert Bosch GmbH
Vision and Mission

**Mission:** “provides the most accessible and straightforward software development kit (SDK) for infrastructure-based solutions”

**Vision:** “to leverage interconnection and integration with all kind of in- and off-vehicle, as well as ecosystems, solution building blocks, enabling the software defined mobility”

We are sponsored by the SofCar – paving the way for software defined vehicle.
Scoping

Application plane
for all the algorithmic tooling [https://github.com/eclipse-moec/motioncontrol](https://github.com/eclipse-moec/motioncontrol)

- Specific agent behaviour
- Sensor and actuator data processing
- etc.

Data plane
for all integration purposes [https://github.com/eclipse-moec/integration](https://github.com/eclipse-moec/integration)

- Signal mapping e.g., for CAN via DBC files
- Clock abstraction and timing e.g., for coordinating multiple actors
- etc.

Operating system (OS)
as control plane, via [Eclipse LEDA](https://www.eclipse.org/leda/)

- Board Support Package (BSP)
- Over the air update and configuration manager (UCM)
- Mandatory functional packages, at least communication middleware and message definitions

Maximum hardware abstraction and environment specific independence, fully loaded with application examples.

No specialized build system.
THANK YOU!