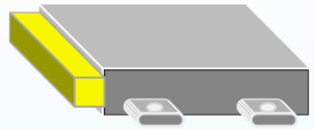
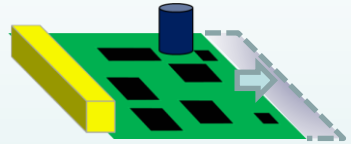
Technical Issues

1. **Incompatibility of Existing EDRs**
   The conventional EDR specifications cannot accommodate the newly required recording conditions and data items, making a redesign of the EDR necessary.
2. **Complexity of Integration with the ACU (Airbag Control Unit)**
   EDRs are typically integrated within the ACU. Therefore, both the performance of the ACU and the EDR must be improved simultaneously, which increases the difficulty of design and development.
3. **Difficulty in Extending Power Hold Time**
   Especially in existing vehicles, supporting the recording items proposed by each CP requires a significant increase in the capacity of power-hold capacitors, making implementation difficult.
4. **Increased Memory and Processing Load Due to Higher Recording Frequency**
   The addition of recording items and the shortening of recording intervals demand enhanced memory capacity and processing power, requiring updates to both the hardware and software of the EDR.
5. **Impact on the Overall Vehicle Architecture**
   Changes to EDR specifications can affect the entire electrical and electronic architecture of the vehicle, potentially necessitating a fundamental redesign.
6. **Concerns About Lead Time for Development, Validation, and Certification**
   The proposals from each CP have a significant impact on the entire vehicle, requiring sufficient lead time for development, validation, and certification.
7. **Compatibility Issues with Existing Vehicles**
   From the perspectives of power hold time, memory and processing load, and vehicle architecture design, applying the regulatory specifications proposed by each CP to existing vehicles is extremely difficult.

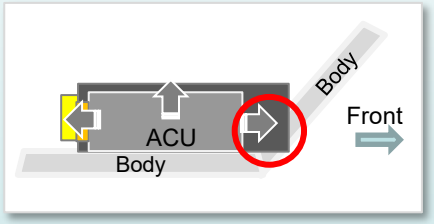
EDR step2 requirement



ACU redesign



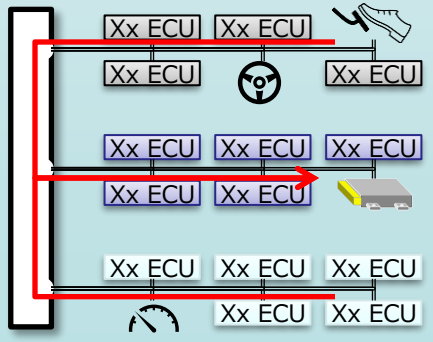
ACU Size up



Other parts redesign

Potentially
a fundamental redesig

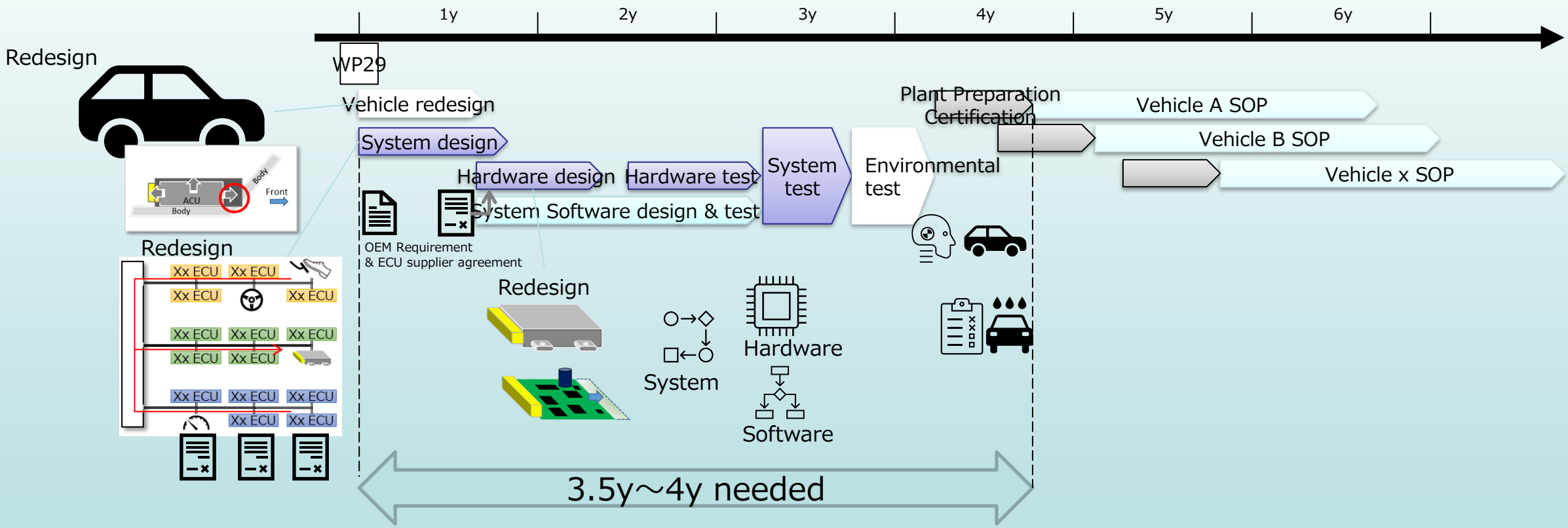
Electronic architecture redesign



Lead Time

The OEM will redesign the vehicle and the E&E architecture.
The OEM will redesign the requirements specifications.
The OEM will re-sign a development contract with the supplier.
The supplier will then begin development of the ACU.
So, we need additional lead time(0.5 ~1 years) = Total 3.5 ~ 4 years.

Current schedule	‘26.11	‘27.11	‘28.11	‘29.11	‘30.11
In case of schedule delay	‘27.3	‘28.3	‘29.3	‘30.3	‘31.3



Based on the current schedule, OICA/CLEPA proposes the new vehicle types from 2031