

# Developing techniques to build virtual environments for automated driving evaluation (3)



## Developing techniques to build virtual environments for automated driving evaluation

### R&D items

#### A. Modeling driving environments

Modeling driving environments that require safety evaluation of the automated driving system and creating scenarios in coordination with measures implemented by the Japanese Ministry of Economy, Trade and Industry

- Defining the driving environment models
- Building the test scenarios and test data generation tools

#### B. Building sensor reference models and evaluation tools

Building the tools for evaluating the functions and performance of sensors in virtual environments and the standard reference models for sensors (cameras, millimeter-wave radar sensors, LiDAR)

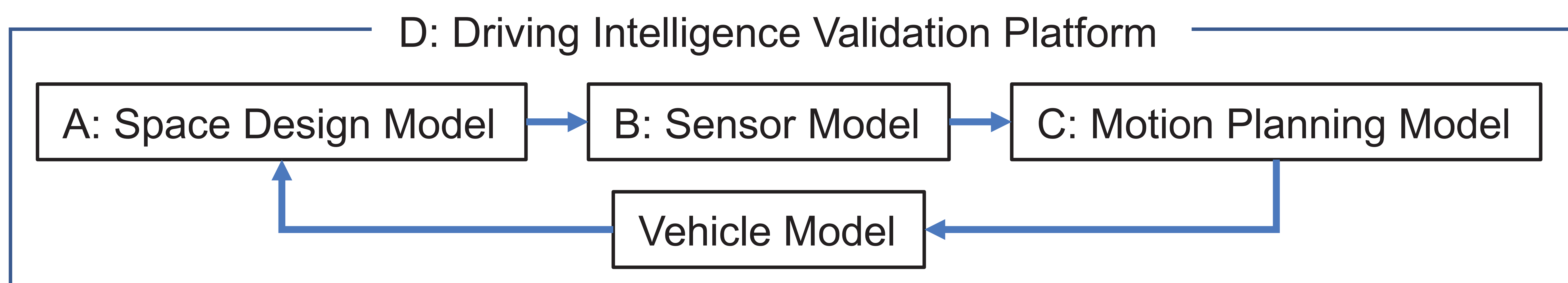
#### C. Building motion planning models

Building motion planning models that are required to evaluate automated driving systems

- Building basic driving models
- Building risk prediction models

#### D. Building the architecture for the automated driving validation platform

The R&D items A to C will be integrated, and the interface of respective modules will be standardized. A toolchain for the automated driving systems evaluation environment will be built.



### Schedule

	FY2018	FY2019	FY2020
A	Expressway model	Intersection model	Urban complex model
B	Camera, millimeter-wave radar sensor, LiDAR model		
C	Survey of existing technologies	Verification of accidents at blind intersections	Verification of urban areas
D	Definition of interface between modules		Building a platform