

Eurailspeed

Parallel Session D.4

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Under the
patronage of



Organisers



Partners



Media partner



Future Research and Achievements of Technological Development for N700

Satoshi Kikuno

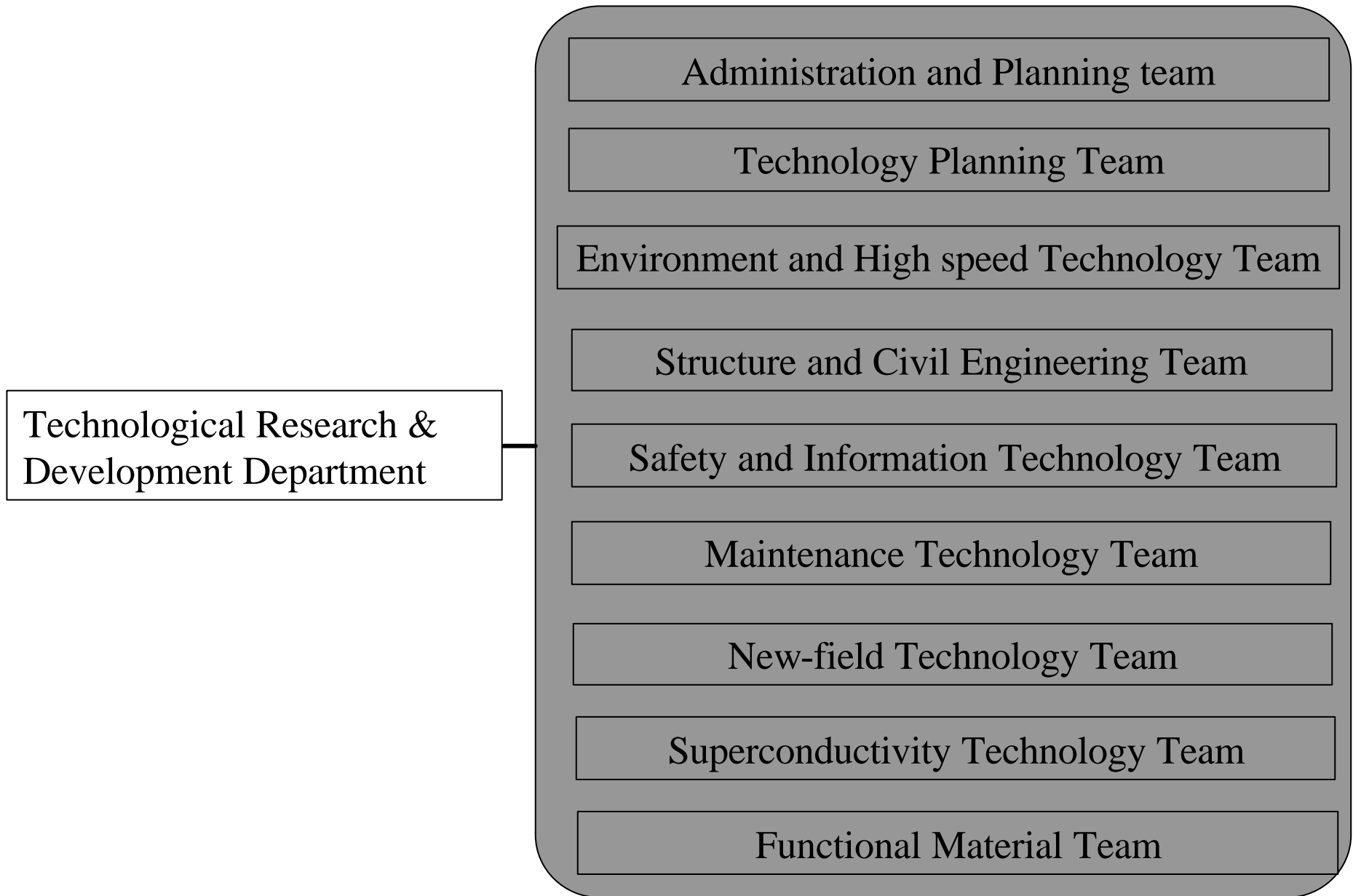
Technological Research & Development Department
Central Japan Railway Company

Outline of the Komaki Research Complex



Ground Area : Approx.73ha

Organization of the Research Complex



Technological Research &
Development Department

Administration and Planning team

Technology Planning Team

Environment and High speed Technology Team

Structure and Civil Engineering Team

Safety and Information Technology Team

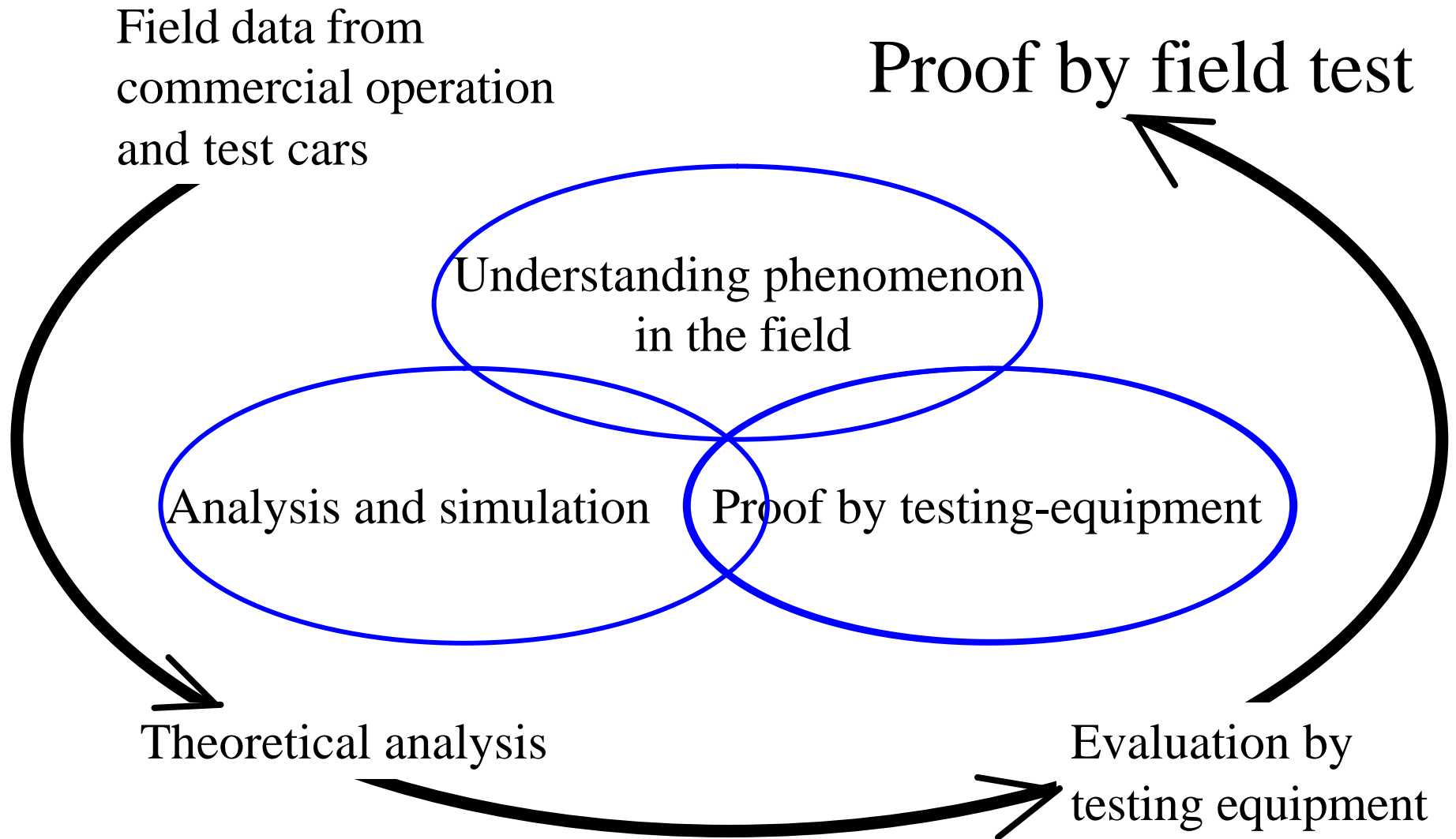
Maintenance Technology Team

New-field Technology Team

Superconductivity Technology Team

Functional Material Team

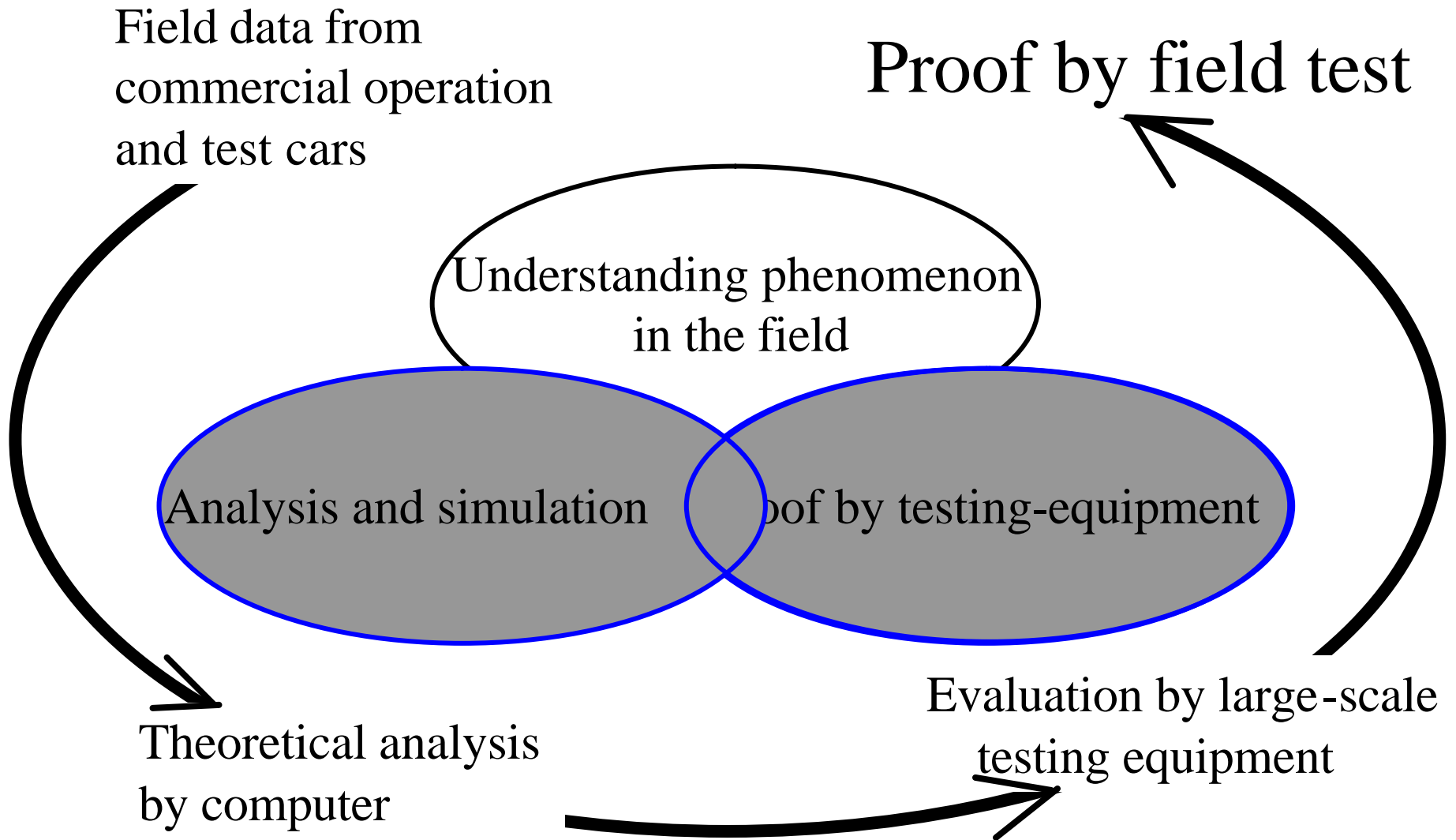
Former procedure for technological development



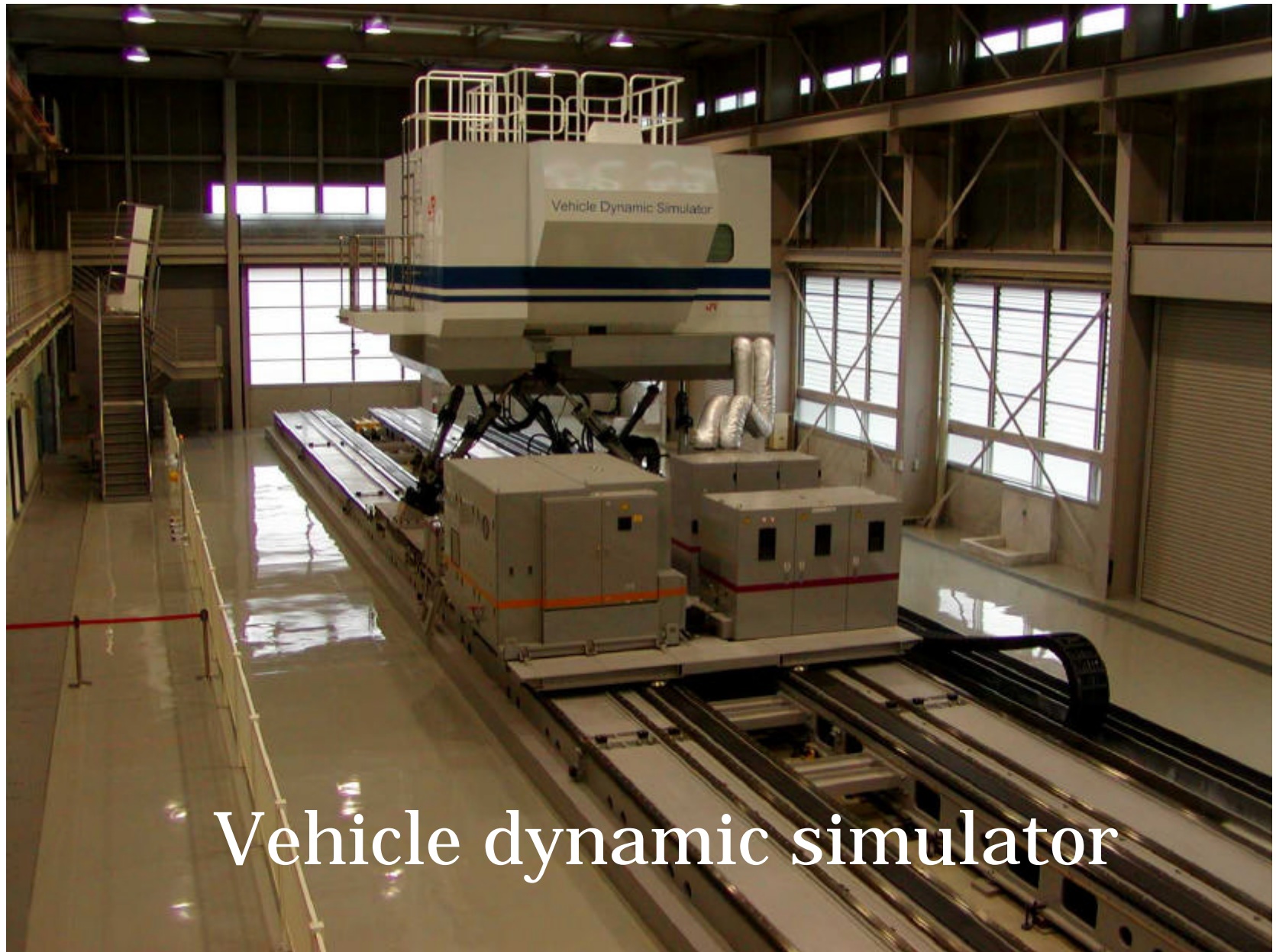
Latest improvement of technological development

1. Collecting and processing massive and cumulative data including field test
2. Experimental evaluation by large-scale testing equipment
3. Computerized theoretical analysis and simulation

Main issue in Komaki



Evaluation by large-scale testing equipment



Vehicle dynamic simulator

Evaluation by large-scale testing equipment



Fatigue Testing Bogie

Dynamic Testing Bogie

Track & structural dynamic simulator

Evaluation by large-scale testing equipment



Railway structural loading test system

Evaluation by large-scale testing equipment



Catenary Vibrator

Evaluation by large-scale testing equipment



Structural Testing Field

Technological Achievement examples for N700



Body tilting system

Current collection system



Technological Achievement examples for N700



Nose shape

All-round hood



At what Komaki is aiming

We are aiming to produce railways more reliable, more comfortable, and more environmentally friendly, in order to ensure that railways become the transportation of choice and attract enough passengers.