

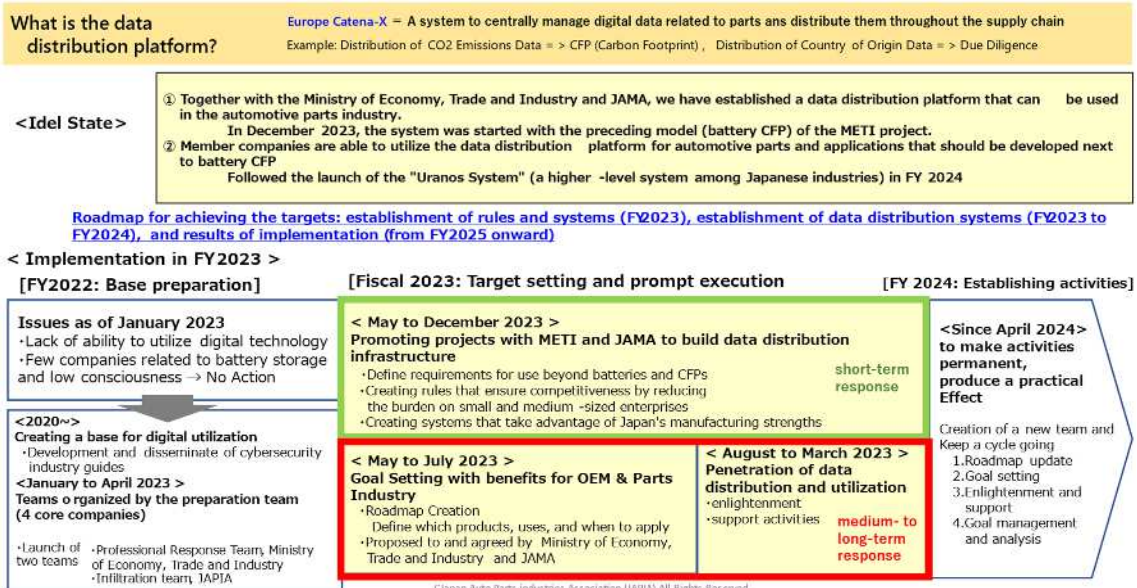
Activities of JAPIA

No.14 : Task Force Activities for the Realization of Data Distribution

Report: Data Distribution Realization Task Force

A New public-private partnership launched in May 2023 to connect the automobile industry's supply chain with digital information

In the automobile industry, which is said to be undergoing a once-in-a-century transformation, digitalization is having a significant impact in the areas of car manufacturing and distribution. In Europe, as electric vehicles become more widespread, digital battery passports, which record information about car batteries, are becoming mandatory. It is inevitable that this trend will spread to all automobile components in the future. For this reason, measures have begun to be taken in Japan in cooperation with the public and private sectors. A measure in response to this trend is "Data Distribution Realization Task Force", which was established at JAPIA in May 2023. The leader, Mr. Masashi Kiyono (DENSO CORPORATION), will explain the purpose of the establishment of this new organization and its activity policy.



Cross-functional task force formed for a completely new initiative

Recently, data utilization has been gaining momentum in the industrial world, especially in developed countries, and new systems have been initiated in various fields. The automobile industry is undergoing a major once-in-a-century transformation, and more and more companies are being forced to take new actions. “Data Distribution Realization Task Force” established by JAPIA in May 2011 is one such example. Originally, JAPIA had a subcommittee system, but since this is a completely new initiative, it does not fit into the existing system. Therefore, the new organization was formed in the form of a task force acrossingdivisions. Discussions began in January 2023 and the task force was formed in May. Activities are now in full swing.

The purpose of the Task Force is to “digitally connect the automobile supply chain”. The task force aimsto promote this goal for JAPIA members as the users, so that they can enjoy the “benefits” of the initiatives. The task force was triggered by a new movement in Europe. Specifically, Europe now has a framework for building a large data infrastructure called “GAIA-X” (European Integrated Data Infrastructure Project), and within this framework, “Catena-X,” aims to share data across the entire automobile value chain. Europe is strategically trying to secure its own regional superiority through this kind of movement, and Japan needs to respond to the movement. While it would be possible to simply follow the European mechanism, Japan is now creating its own system from the viewpoint of securing data sovereignty for the future. The Task Force supports this movement and works to ensure that each JAPIA member, as a user of this system, take the benefits of the system.

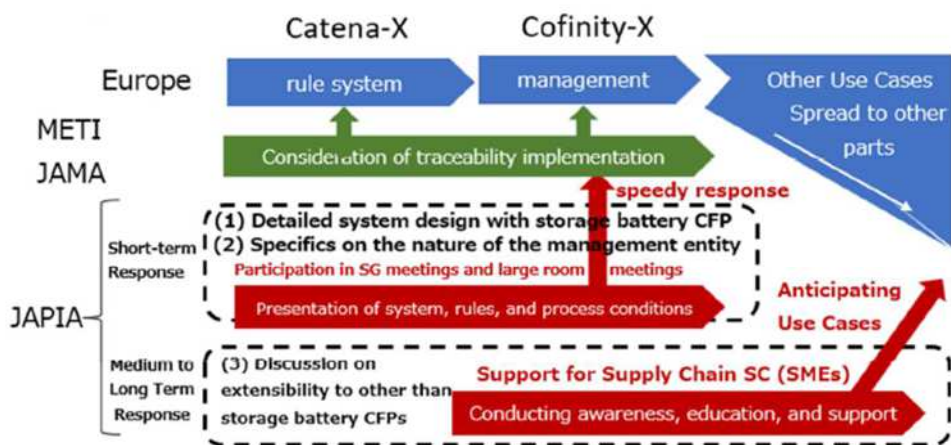
Activities aimed at complying with the 2025 “EU Battery Regulation”

This activity cannot be slowed down. EU is pressing Japanese car manufacturers to comply with the “EU Battery Regulation” by 2025. The regulation requires the linking of “carbon footprint” (the amount of greenhouse gas emissions throughout the life cycle of goods and service, from procurement of raw materials to disposal and recycling) and “due diligence” (no human rights violations) as digital information on so-called storage batteries. In the extreme, it is acceptable to input these data by hand, but considering the future and the practical burden, it is more realistic to utilize DX, or digital data distribution systems. Therefore, under the lead of the Ministry of Economy, Trade and Industry (METI), we are working with other organizations, such as Japan

Automobile Manufacturers Association, Inc., which are the OEM customers of automobile component companies, to develop measures to deal with this issue. However, only a few JAPIA member companies, including DENSO CORPORATION, are involved in the field of storage battery. You may think if it is necessary to form a specialized organization to deal with this issue, but this organization is taking into consideration the movement that will follow.

The “EU Battery Regulation” is the first use case for digital certificates to ensure traceability along the lifecycle of products that Europe will promote in the future, and it is being discussed that this trend will be applicable not only to the automobile industry but also to other industries such as metals, materials, and chemicals. JAPIA has two teams in Data Distribution Realization Task Force, one for the “short term” in response to the EU Battery Regulation, and the other for the “medium to long term” to clarify future use cases and prepare for them. The current team consists of 4 core companies and 13 member companies. The short-term team has 25 members, and the medium- to long-term team has 22 members.

This “short-term” activity is, in a sense, a “forced” activity. This is because Japanese companies doing battery business in Europe have to do it whether they like it or not. This alone is not enough to motivate them. The mid- to long-term team will consider various issues, such as strengthening the supply chain and improving quality. I would like to make sure that the data is used effectively, not in a “forced” way, but in a way that our member companies enjoy the benefits.



Medium- to long-term response will proceed in the following order: creation of a roadmap, agreement with JAMA, and goal setting.

Remember, folks. Japanese industry has had bitter experiences in Europe. We have been confronted with three sets of "rules," "tools," and "certification" from the European side, and we have been forced to deal with them. This has not happened once or twice. Of course, these three sets are prioritized in favor of the European side and advantageous to them.

It is the same this time. So much so that if we make a mistake in our response, we will be in pain again. In other words, now is the critical moment. This kind of problem cannot be solved by a single company. It requires an all-Japan effort in cooperation with METI along with other organizations such as JAPIA and JAMA. Currently, METI and its affiliated organization, the Digital Architecture Design Center (DADC), are working to establish a data distribution system infrastructure called the "Ouranos Ecosystem" as part of a system unique to Japan, as mentioned earlier. JAPIA is discussing with METI and DADC from the standpoint of how to use this system to comply with the EU Battery Regulation in the short term, and how to incorporate future use cases into this infrastructure in the medium to long term.

Regarding the medium to long-term perspective of supply chain resilience and quality improvement, in the former case, if a problem occurs anywhere in the supply chain due to a disaster, for example, data distribution may enable the fastest possible recovery from the problem. In the latter case, for example, if the supply chain is digitally connected, it is possible to quickly identify which part, product, or process is causing the problem and solve it smoothly. Each of these activities can be expected to bring "joy".

Such activities are not likely to be expanded if they are conducted only out of a sense of "being forced to do something. In addition, medium- to long-term ideas and concepts alone are not enough. To motivate people, it is necessary to "feel the positive change from zero". For this reason, we have started to consider and discuss the above demonstration experiment with the support of the Automobile Division of the Ministry of Economy, Trade and Industry, with the first step being to have people in the automobile industry experience whether the system can be used in the field. The idea is to actually try out the system. If this is successful, the participation of member companies of JAPIA and their activities will become more active.

Again, collaboration with other organizations such as JAPIA, JAMA, and the Ministry of Economy, Trade and Industry (METI) is important for this activity. We cannot compete with Europe unless we have an all-Japan team of the public and

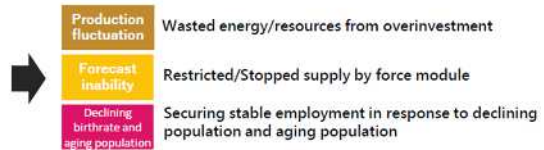
private sectors. We have reported our activities to the "General Technical Committee" of JAPIA and held a briefing session for JAPIA members on November 28, 2023. 133 people participated in the session online, which made us realize that everyone is interested in this project.

Policy: Through the introduction of data distribution platform, use cases and parts are selected to solve social issues and issues in the automotive industry.

The current business environment is in the midst of the VUCA era, with the COVID-19 and associated lockdowns of production bases, closed borders, deteriorating economic conditions, shortage of materials and parts such as semiconductors, increasing raw material prices, and efforts to address social issues such as carbon neutrality.

Urgent issues in the automotive industry (example)

VUCA Category	Keywords
Volatility	Procurement, Inventory, Cost, Production ...
Uncertainty	Demand/supply trends, policies, natural disasters, geopolitical risks ...
Complexity	Commerce, Globalization of Logistics, Circulation ...
Ambiguity	CFP, RC, new entrants by emerging economies ...



Building a **new relationship of mutual trust** between OEMs and suppliers and creating a stable supply chain in which suppliers operate autonomously is important

In order for Tier1 suppliers to change from relying on original equipment manufacturers (OEMs) to being able to make decisions and take actions based on various types of data, it is essential to share data throughout the supply chain and implement the following:

Tier1 Suppliers Can Detect Market Defects and Reduce OEM Burden

Reduce the impact of production fluctuations on the supply chain

traceability management
Visualization and reduction of CO2 emissions

traceability management
Early detection of defective products

Supply Chain Resilience and Optimization
Inventory Visualization and Forecast (Production Changes)

=> The idea is **for both OEMs and suppliers to enjoy genuine benefits** through the introduction of a data distribution platform.

Prioritize the improvement of CFP/product quality, value-added, and resilience

Create a mesh-type linkage of data that has been centrally and directly linked to OEMs through the digital

Create a mechanism to achieve easy and quick access to the information necessary for players in the SC to focus on sound production and development activities.