

Summary of the 1st Asia Automobile Institute Summit (AAI Summit)

November 26–27, 2012, at the Shiba-Park Hotel in Tokyo, Japan

1. Plenary Session #1

Institutes' organization and operation, working issues, etc. were introduced by each institute, JARI (Japan), ARAI (India), INARD (Indonesia), MIROS (Malaysia), TAI (Thailand), and information was shared. Differences relating to individual countries' background and common issues were identified.

Note:

JARI: Japan Automobile Research Institute

ARAI: Automotive Research Association of India

INARD: Indonesia Automotive Research and Development Institute

MIROS: Malaysian Institute of Road Safety Research

TAI: The Thailand Automotive Institute

2. Management Session

1) Common part

A presentation titled "On the Road to Sustainable Mobility in Asia" was given by Dr. Seko, (General manager, Research Planning and Administration Division, JARI) and he introduced activities mainly regarding traffic safety issues, fuel economy, exhaust emission issues and global environment issues in Japan. In order to establish sustainable mobility in Asian countries, he stressed three important areas to be tackled as follows:

- a. Interactive technologies to improve daily life.
- b. Diversification of mobility by EV, FCV, Robot and Intelligent Transport Systems
- c. City space and technologies for traffic infrastructure such as traffic flow control large data.

The technology of the fuel economy of 30 km/L for "MIRA, small passenger car" was a topic of interest and details of the contributing technologies were given after the meeting. Experts of noise and recycling technology areas, which were not introduced, were given as contact persons.

2) Session A

Dr. Ishiyama, (General Manager, General Administration Division, JARI) introduced "Researchers Exchange" and proposed some ideas of short term and long term programs such as technical support or cooperation from JARI, training at JARI and long term researchers exchange programs, etc. Those proposals were understood as essential

countermeasures to settle issues of the rapid mobility boom in Asian countries, and an agreement on those proposals was essentially reached among the participant countries. The name of a contact person from each country shall be given to JARI before the Christmas. Further, we also agreed that the activities on this issue shall be exchanged by the end of June.

3) Session B

Mr. Nakatani, (Manager, Research Planning and Management Division, JARI) introduced "Introduction to JARI's Test and Research Facilities". Securing funds, etc., and methodologies of the ownership of the facilities were discussed as a common issue in participant countries. Currently, most of the institutes are taking ownership by using their own funds, however, the ownership of the facilities are different for each institute. It was clarified that the ownership of the facilities will be taken by various methods from now on. Further, information of homologation or certification tests was also mentioned. The introduction to JARI facilities and the information on cooperation, or technology support as a useful mutual application were shared as essential for the arguments in this meeting and for mutual technical cooperation in the future.

3. Technical Session

1) Session A

a. Eco-Drive

Mr. Funazaki, (Field Manager, Energy and Environment Research Division, JARI) introduced "Eco-Driving - Introduction of the Japanese activities and a plan of a demonstration experiment in China -". Regarding management systems of Eco-Driving, the activities in China (Wuhan) and also in Thailand were introduced. Organizing eco-driving workshops, installation of eco-driving support systems with digital tachograph and the effects on driving improvement after installation were explained.

Common understanding is that an effective system needs to take into account individual methods according to the differences in the situation of heavy traffic congestion and drivers' behaviors in each country. In addition, some possible resistance from labor associations who may not agree with driver reward programs was a point raised by India. Also a common understanding is that it is effective to start with bus and truck fleet employers, according to experiences in Japan. All participant countries agreed that regarding the possibilities of introduction to each country, information about the activities at JARI and the particular situation in each country will be exchanged.

b. EV's issues

Dr. Tomioka, (Deputy General Manager, FC-EV Research Division, JARI) introduced "The Prospect of International Standardization for Electric Vehicles" and Mr. Komawar, (SR. Deputy Director, Automotive Electronics Department, ARAI) introduced "Electric Mobility – Indian Homologation Requirements & Testing Infrastructure".

From both presentations, common understanding and agreement were obtained as follows:

- EV are essential to achieve a low-carbon community, even though now EV have a small share of the market.
- There are some issues to be settled, such as securing safety, prevalence of charging infrastructure and reducing cost of batteries, for diffusion of EV.
- It was agreed that participant countries will continuously exchange information about the activities relating to EV in each country. JARI believes that they can support the activities on diffusion of EV in each country.

2) Session B

a. ISO26262 "Functional safety"

Mr. Osuga, (Field Manager, Research Planning and Management Division/Global Networking, JARI) introduced "Functional Safety (ISO 26262) activities in Japan". A presentation on specific items of ISO 26262 and JARI's activities was made and mutual understanding was deepened through active discussion. Specific needs were clarified as follows and contact people were nominated for the next steps.

- The need of translated documents or information about a handbook and workshops.
- Dealing with ISO 26262 is essential for electrification of automobile. Therefore, a seminar or training concerning with this issue.
- There are a lot of managers in participant countries who need to understand ISO 26262. The need of a meeting place in each country for holding workshops or seminars, as one part of collaboration.

b. Safety issues

Dr. Sakurai, (General Manager, Safety Research Division, JARI) introduced "JARI Research Activities for Traffic Safety", and Mr. Isa, (Researcher, MIROS) introduced their activities on "ASEAN NCAP: New Car Assessment Program" and their activities on traffic safety issues as recent developments.

Through questions and answers, and the discussion, MIROS proposed to start discussion on cooperate framework of the "ASEAN NCAP". In addition, it became clear that motorcycle safety issues were a high priority in Asian countries. Those needs were shared

as common understanding and all agreed to continue the discussion on next step approaches. A contact person was nominated in each country for that purpose. Countries which did not nominate will report later.

4. Plenary Session 2

1) Summary of each session

The chairman of each session explained the results and the future plans according to the presentation material and confirmed the issues agreed upon.

2) Summit summary

Mr. Handa, (Managing Director, JARI) stated his appreciation and recognized everyone's cooperation for the summit. He confirmed the intent of the meeting, and referred to each session's results. Based on the following results from this meeting, he pointed out the necessity of a pre-meeting opportunity for discussing the contents of the next meeting, toward settlement of shared issues. He also stressed that he wishes to step up from the discussion phase to action resulting in concrete achievement. Finally, he proposed the meeting management guidelines as follows and it was agreed to by the attendees.

- a. Continue to hold summits up to the number of attending countries.
- b. Rotate the host country, and the host institute sets the theme and manages the summit. JARI is the founder, therefore they are going to act as a joint secretariat for the time being.
- c. Decide "AAI Summit" as a proper name.
- d. Keep summit costs as low as possible, so as not to be unaffordable.

3) Comments from guests

Mr. Kulkarni, (Sr. Deputy Director, ARAI) stated his appreciation to the participants and hospitality of JARI members. He commented that he wishes to attend continuously.

4) Closing speech

Dr. Kobayashi, (Director, JARI) stated his gratitude to all the participants and the guests of honor. He said that this meeting marked a great first step for "Achieving mutual understanding for future collaboration" and "Establishing a network among the leaders of each institute." Also, he said that as for the Asian automobile society, I truly understand the importance of the hard challenges we face to solve issues from a long-term viewpoint. A key issue in the area of "Automobile Safety" and "Environment and Energy" is to tackle technologies of vehicle safety enhancement, safety and emission regulations, certification schemes, and infrastructures from a product and service viewpoint. I think that those areas

are the most important for Asian countries now.

5. Technical Tour

Attendees from abroad and an interpreter moved to JARI Tsukuba by bus, one joined later at JARI, and visited the laboratories of FC-EV, Energy and Environment and Safety Research Division with guidance from the researchers at each site. They took a careful look at major facilities and asked questions. After the site visit and an overall question and answer session in a meeting room, they took a bus and returned to Tokyo.