

# EV Super Micro Mobility Design Contest

## Project Overview



APEV

電気自動車普及協議会

Association for the Promotion of Electric Vehicles

Ver 1.03

# Purpose



Recently, increasing attention is being paid to government involvement with Super Micro Mobilities (SMMs), and various trials concerning the development of SMMs are also currently being conducted in the private sector. Given this present situation, APEV has planned a contest to encourage the promotion of SMMs, as well as to offer the opportunity to experience the excitement of manufacturing to students who will lead the next generation.

## EV Super Micro Mobility Design Contest

### Project Overview & Objectives

- To gather, screen & release 3D designs of an EV SMM body which meet the standards set by the Ministry of Land, Infrastructure, Transport and Tourism.

**APEV is looking for a design not only of the vehicle itself but also of its ongoing relations with society, environment, communities, people, culture, etc.**

- In order to carry out the project, teams of student designers are expected to be organized into teams.

- A team must consist of no less than 2 members, and should promote cooperation, creating an environment in which all members can generate, share & develop ideas.

- A feature perhaps unique to this competition: participants will share their progress via a social networking platform, and their creative processes will in turn be subject to evaluation.

- 3D design tools will be provided to participants during the final screening.

- Digital tools should be regarded as ‘resources’ rather than merely as ‘tools’.

- The contest will be held annually from this year on, and its final goal will be the realization of the participants’ 3D designs.

# What is a Super Micro Mobility (SMM)?



## What is a Super Micro Mobility (SMM)?

The Ministry of Land, Infrastructure, Transport and Tourism defines a Super Micro Mobility as “smaller than an automobile, for the use of 1 or 2 passengers; able to easily maneuver in small spaces, providing eco-friendly and easy transportation for local communities” in “Safety Guidelines for the Introduction of Super Micro Mobilities”, published in June 2012. (<http://www.mlit.go.jp/common/000212867.pdf>) (Japanese language)

In addition, it is expected that the introduction and promotion of SMMs will subsequently benefit society in a multitude of ways, such as by decreasing CO<sub>2</sub>, increasing the vibrancy of local communities, providing a new means of transport in cities, encouraging elderly people and parents with infants in their daily lives, and so on.

The following criteria are described in the paper “System for the certification of SMMs” under the report titled “Introduction of the SMMs”, released by the Ministry of Land, Infrastructure, Transport and Tourism of Japan on 1st Feb 2013 ([http://www.mlit.go.jp/jidosha/jidosha\\_fr1\\_000043.html](http://www.mlit.go.jp/jidosha/jidosha_fr1_000043.html)) (Japanese language)

A Super Micro Mobility must meet all of the conditions below.

- ① The length, height and width of the vehicle’s body are all within the standard measurements for a light vehicle . Maximum size of the Light vehicle in Japan (KEI) are Length=3.4meters ,Height=2meters,Width=1.48meters.
- ② The capacity of the vehicle is 2 passengers (3 passengers in case with 2 small children in assisting seats)
- ③ Rated output does not exceed 8 kilowatts. (Less than 125cc in case of ICE)
- ④ The vehicle runs only in areas where traffic safety is monitored by a local government, and does not run on highways

# Organizations



## Organizations Involved

**Host: Association for the Promotion of Electric Vehicles (APEV)**

**Supporters: Ministry of Land, Infrastructure, Transport and Tourism**

**Ministry of Economy, Trade and Industry**

**Interfaculty Initiative in Information Studies, Graduate School of  
Interdisciplinary Information Studies University of Tokyo**

**DASSAULT SYSTEMS**

•The secretariat unifying all the relevant participants and organizations will be responsible to APEV.

•Yamauchi Laboratory (Interfaculty Initiative in Information Studies, University of Tokyo) will invent, research and examine an educational system utilizing CAD and social networks.

•DASSAULT SYSTEMS will provide 3D design software and a social networking platform.

**\*APEV is continually looking for supportive companies that would be interested in providing hardware and/or software for the contest.**

# Expected Participants and Screening



## Expected Participants

Teams of students from domestic & overseas institutions. A team must consist of no less than 2 members, and all members must be over 18 years old. **Entry forms are now being collected.**

## Screening Processes

- 1) First round: vehicle concept, including description of practical use & 2D sketch of vehicle (drawing by hand accepted).
- 2) Final round: 3D realization of the designs that passed the first round.

## Screening Criteria

The four criteria below (for both the first and the final screenings):

Concept	Clarity of concepts. Teams should clearly imagine and express the ongoing relations between the EV SMM and society, the environment, communities, populations, culture, etc.
Originality	Originality of ideas. Note that the design must be the original work of participants, and must have never been released before.
Feasibility	Plausibility of designs. Teams should aim to produce ideas that could convincingly be realized in the future.
Communication among participants	Active use of social networking platforms. Teams will be evaluated not only based on their final work submitted, but also on their creation processes (i.e. the quality & frequency of posts & communication with other participants via social networks)

## Tools to be used

- When winners of the first selection prepare for the Final round of screening, they will use 3D design software and hardware provided for free by sponsor companies for the duration of the contest.
- The competitors will exchange information with the hosts, other competitors and observers via social networks.
- \*APEV is continually looking for supportive companies that would be interested in providing hardware and/or software for the contest.



# Screening Committee, Schedule, Awards

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## **The head of Screening committee**

Mr Ken Okuyama (Industrial designer & CEO, KEN OKUYAMA DESIGN)

## **Screening committee**

Mr Tadao Ando (Architect & Professor emeritus, University of Tokyo)

Ms Mineko Orisaku (Photographer & Professor, Photography Department, Osaka University of Arts)

Mr Yoichiro Kawaguchi (Professor, Interfaculty Initiatives in Information Studies, University of Tokyo)

Mr Akira Fujimoto (Publication representative of 'Car Styling')

Mr Nobuhiro Tajima (Chief Commissioner, APEV)

## **Schedule**

Official announcement: Tuesday, January 15 2013

Participation will be closed: Wednesday, May 8 2013

Deadline for the first round: Friday, June 28 2013

Result of the first round will come out: Wednesday, July 10 2013

Deadline for the final round: Friday, September 27 2013

The final result will be announced: Friday, October 11 2013

Conference at Tokyo Motor Show "SMART MOBILITY CITY": End of November 2013

\*The schedule is subject to change.

## **Awards**

Special experience involving EV, e.g. meeting a well-known designer, opportunities to visit overseas institutions (organizations, colleges/universities, companies, etc.)

# Benefits for participating students

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## Benefits for participating students

This contest is expected to offer students the chance to:

- Improve their ability to elaborate concepts, to design and make proposals
- Present their skills to the wider world and widen their career paths
- Sharpen their manipulation of digital tools
- Merchandize their ideas

# Entrance Procedure



## How to enter

Please fill in the entry form attached separately and send it to the secretariat.

(Secretary-general: Gen Yasujima, [contest@apev.jp](mailto:contest@apev.jp))

\*Please refer to page 9 for details.

## Eligibilities

- Teams of students from domestic & overseas institutions. A team must consist of no less than 2 members, and all members must be over 18 years old.
- Any nationality is eligible.
- Participants must register accounts on the social networking system provided, and are expected to post progress reports on a weekly basis, as well as making constructive comments to other teams.
- Participants are expected to participate in evaluative surveys of the contest both before & after it has run its course.

## Focal points of submissions

i.e. Conceptual designs of vehicle & its environment

- **First round:** vehicle concept, including description of practical use & 2D sketch of vehicle (drawing by hand accepted)
- **Final round:** 3D realization of designs that passed the first round & materials for their presentation
  - \*Each team must make one submission each.
  - \*The 3D design software will be only provided to the winners of the first round.



# Terms & Conditions, Privacy Policy



## Terms & Conditions

- The design must be the original work of participants, and must have never been released before.
- Submissions which defy public order and/or standards of decency, comprise slanderous statements, and/or infringe the rights or benefits of others, will not be included in the selection. Should such problems come to light even after the awarding ceremony, the works involved will still be eliminated.
- Entering submitted work simultaneously into any other contest is forbidden. In addition, teams must obtain confirmation from APEV before sharing their progress with other organizations after having made their entry.
- The materials submitted will not be returned. Teams are therefore advised to keep a copy for their own use if necessary.
- Responsibility for production costs rests with the teams themselves. 3D design software, however, will be provided free of charge to the winners of the first round.
- Regardless of which submissions are awarded, all of the intellectual property rights, such as those of visual ideas, design patents, feasible new ideas, trademarks, etc. of all participants' work will be shared with APEV. Both their implementation and use will also, in turn, require confirmation from APEV.
- Upon entry participants are advised to take appropriate action independently, such as organizing rights protection, if deemed necessary. Should problems involving third parties arise, APEV will be unable to take any responsibility, and participants are expected to seek solutions themselves at their own costs.
- APEV reserves the right to feature awarded works in exhibitions, websites, and media that the organization publishes. APEV will also provide information concerning awarded works to the media at press conferences.
- Should participants' designs be realized or commercialized, their creators will be obliged to discuss copyright, terms of implementation, use, and any other rights of their work with the manufacturers and/or sponsors involved. APEV may act as an intermediary in this consultation.
- Should participants' designs be realized or commercialized, their creators may be asked to express their involvement with the contest.
- Names, ages, careers, etc. of the winner(s) will be released in print, on the internet, and to the press.
- Please bear in mind that participants' work and comments may be used for further research purposes.

## Privacy Policy

All of the information you provide will be used only to the extent necessary for the purposes below.

- To inform participants of selection results
- To provide new information about the contest
- To make inquiries to participants about their work

Further, the Committee will also treat participants' information with the greatest care, and will endeavor to prevent it being leaked or falsified.

# Prospective sponsors

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## Sponsors

Prospective sponsors:

Stratasys Japan Inc.,

Benesse Holdings, Inc.,

Wacom Co., Ltd., Dell Inc.,

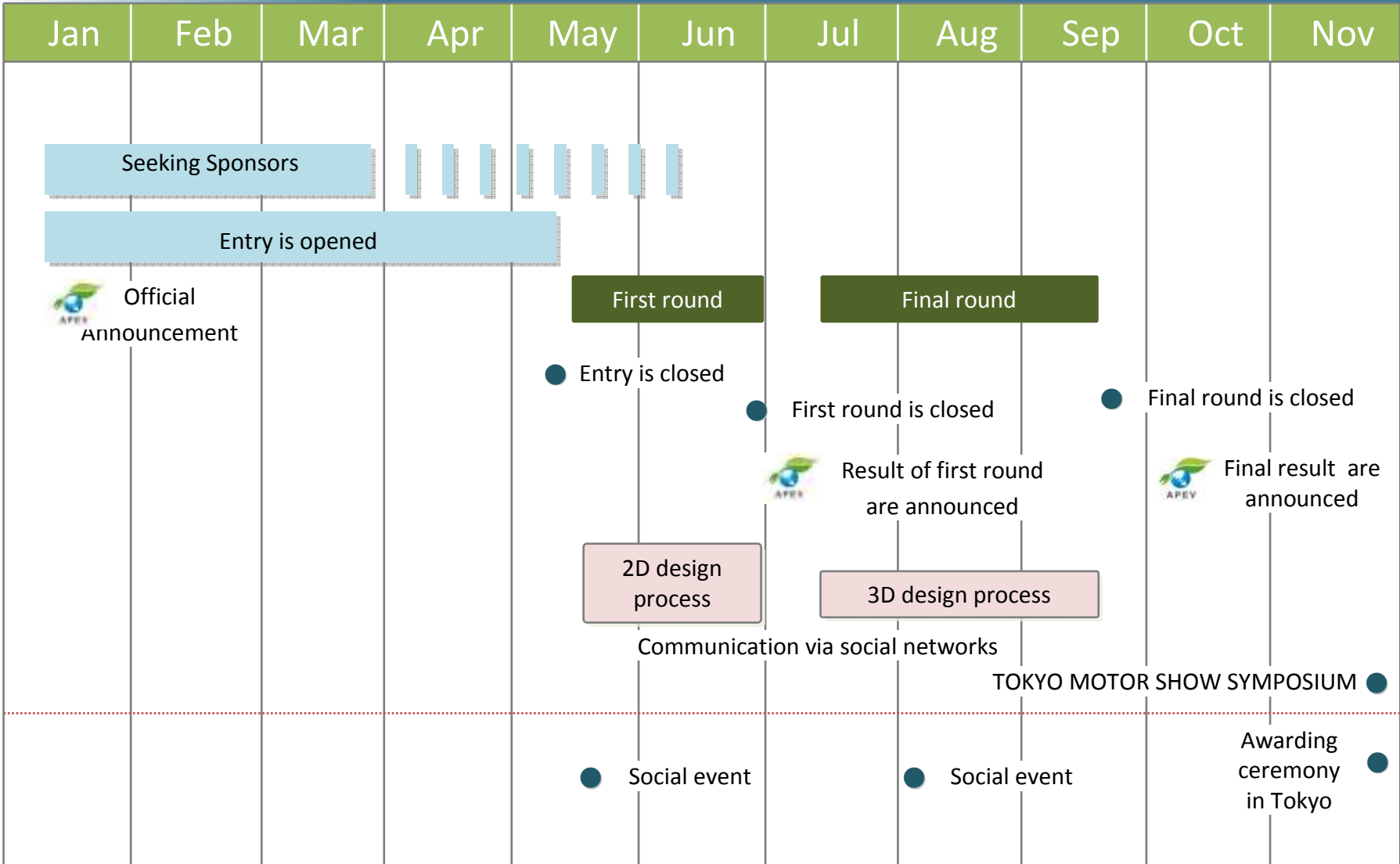
Hewlett-Packard Japan, Ltd.,

Lenovo Japan, Ltd.,

ASPROS INC.

\*Sponsors are continuingly being sought.

# Schedule of the contest



**We would like to offer our thanks for  
your continued support and endorsement.**

