### UN/SCETDG/34/INF.14

# COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS AND ON THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

Sub-Committee of Experts on the Transport of Dangerous Goods

Thirty-fourth session Geneva, 1-9 December 2008 Item 15 of the provisional agenda

#### ANY OTHER BUSINESS

#### Request for consultative status by KiloFarad International (kFI)

#### Note by the secretariat

The secretariat has received from kFI an application for consultative status.

The application letters are reproduced hereafter, and the documentation provided is attached thereto.

- (a) Manual of organization and procedure
- (b) Memorandum of understanding between kFI and ECA
- (c) Contacts
- (d) KFI history of dues received
- (e) Classification of ultracapacitors



#### 8 September 2008

Mr. Olivier Kervella
Secretary
UN Subcommittee of Experts on the Transport of Dangerous Goods
United Nations
Economic Commission for Europe
Transport Division
Dangerous Goods and Special Cargoes Section
Palais des Nations
1211 Geneva 10

#### Dear Mr. Kervella:

kiloFarad International (kFI) is interested in obtaining consultative status with the United Nations Subcommittee on the Transport of Dangerous Goods. We are interested in participating in discussions on transport requirements for ultracapacitors. We hope this topic will be discussed at a UN Subcommittee Working Group on Lithium Batteries in Washington, DC in November 2008 with the potential for subsequent discussions at the UN Subcommittee meeting to be held in Geneva in December 2008. We would appreciate consideration of our application for consultative status at the December meeting so that we may participate in discussions on ultracapacitors at that meeting and subsequent meetings where transport requirements for ultracapacitors are discussed.

Ultracapacitors are widely used in commercial energy storage systems, consumer electronics, fuel efficient vehicles, transportation, and industrial power systems. They are an important element in the development of alternative energy management strategies. In hybrid automobiles and hybridized busses, trucks, delivery vans, etc, ultracapacitors are used to store electrical energy produced during vehicle braking and make it available for subsequent reuse during vehicle acceleration. This improves vehicle fuel economy while significantly reducing the generation of harmful greenhouse gasses. In emergency power generating systems ultracapacitors are commonly used to provide a smooth transition from the normal power supply to the emergency power supply in the event of a power failure. In these applications they replace lead acid batteries. These examples illustrate the importance of ultracapacitor technology in today's society with its emphasis on energy efficiency and environmental protection.

Over the last decade, significant progress has been made in ultracapacitor performance and efficiency. During that same time, the markets have developed and now millions are put in use annually. Multiple suppliers of high-power ultracapacitors are in operation around the globe with



high volume production capacities. Uniform transportation safety regulations are essential for facilitating ultracapacitor transport throughout the world. Clarification of the existing transport

regulations as they apply to ultracapacitors is important to transport safety and efficient transport of ultracapacitors and equipment in which they are installed.

Kilofarad International (kFI) is an industry association that was organized to promote the interests of the ultracapacitor community. Our members include the leading ultracapacitor developers and manufacturers as well as customers of these products. Detailed information on kFI may be obtained on our website at http://www.kilofarad.org/. kFI members have headquarters or operations in France, Germany, Korea, Japan, Switzerland and the United States of America A particular kFI objective is to promote uniform standards for ultracapacitors. kFI is affiliated with the Electronic Components, Assemblies, & Materials Association (ECA). As an affiliate of ECA, kFI is directly linked with one of the world's foremost standards-setting bodies, and leverages the expertise and network of the ECA infrastructure. All interested parties, including ultracapacitor manufacturers, suppliers, industry experts, original equipment manufacturers and end-users are encouraged to participate in kFI initiatives.

We believe kFI is unique in its ability to represent all aspects of the ultracapacitor industry due to the wide and varied perspectives of its constituents. We also believe that kFI's participation in discussions on ultracapacitor transportation will enable the Subcommittee to make better informed decisions regarding the development of specific requirements for ultracapacitors. If you agree, kFI will prepare an information paper describing ultracapacitors, transport regulatory issues and proposals for ultracapacitor specific requirements for inclusion in the UN Model Regulations. kFI appreciates your kind attention to this matter and looks forward to your reply.

Sincerely,

Michael Everett Chairman of the Board kiloFarad International



16 October 2008

Mr. Olivier Kervella
Secretary
UN Subcommittee of Experts on the Transport of Dangerous Goods
United Nations
Economic Commission for Europe
Transport Division
Dangerous Goods and Special Cargoes Section
Palais des Nations
1211 Geneva 10

Dear Mr. Kervella:

This is in response to your email request of 15 September 2008 to Mr. Wybenga in which you requested additional information on KiloFarad International (KFI) in order to process KFI's application for consultative status dated 8 September 2008. Your requests and our responses are provided below.

(a) The purpose of the organization;

**Ans.** As noted on the KFI website (<u>www.Kilofarad.org</u>), "the mission of Kilofarad International is to promote the interests of the international ultracapacitor industry in the commercial and regulatory arenas through education and representation."

(b) Information as to the programmes and activities of the organization in areas relevant to the work of the Sub-Committee and the country or countries in which they are carried out;

Ans. The KFI Regulatory Working Group currently has two projects on its work agenda related to the work of the Sub-Committee. The most closely linked objective is to establish uniform international transport requirements for all transport stages. Most ultracapacitors contain small quantities of acetonitrile, a class 3 flammable liquid. As such, the relevant dangerous goods transport regulations need to be considered. KFI is interested in establishing the appropriate level of dangerous goods transport requirements for all stages of transport. Stages include transport of ultracapacitor units from a producer to an equipment manufacturer, transport of ultracapacitors in components or finished equipment, transport and distribution of spare ultracapacitors for repair purposes including for retail sale, and return of used ultracapacitors for recycling. Work to date includes development of an information paper setting out proposals for transport provisions which KFI hopes will be considered by the UN Sub-Committee's November 11-13 Lithium Battery Working Group, meetings with the US Department of Transportation,



evaluations of the hazards of ultracapacitors by Sandia National Laboratory and Southwest Research Institute in the United States and by INERIS in France and development of relevant technical standards through standards setting organizations.

A second objective is to establish a uniform world wide recycling strategy and program for pickup and delivery to central recycling sites in Europe, Asia and the United States. Current activities are centered on providing large samples of ultracapacitor parts to the selected sites in Europe. Defining the appropriate packaging and transport requirements is an element of this effort.

Within KFI these initiatives are led by the Regulatory Working Group. The efforts are largely coordinated from the US with members of the working group from the US, Korea, Germany and France.

(c) Confirmation of interest in the goals and objectives of the Sub-Committee;

**Ans.** KFI shares the goals and objectives of the Sub-Committee in that it is interested in providing for the safe transport of ultracapacitors, which contain small quantities of a substance (acetonitrile) subject to the UN Model Regulations on the Transport of Dangerous Goods, in all stages of transport through the development and adoption of uniform international requirements. We also seek to do so in a manner that protects the environment.

KFI's purpose is to serve as a strategic forum for its members by:

Coordinating uniform technical standards through existing standards organizations; Coordinating life cycle management strategies in the regulatory and legislative arenas; and

Developing and publishing technical data, design tools, and educational materials.

KFI is an industry association, representing the broad interests of ultracapacitor stakeholders, including ultracapacitor manufacturers and manufacturers of equipment incorporating ultracapacitors (e.g., hybrid automobiles and alternative energy sources ultilizing solar, wind and hydro power sources). KFI is the authoritative source of ultracapacitor-related information. KFI is a global industry association, representing the broad interests of ultracapacitor stakeholders, and is the authoritative source of ultracapacitor-related information.

(d) Confirmation of the activities of the organization at the national, regional or international level;

**Ans.** KFI seeks to achieve uniform international technical standards for ultracapacitors through coordinated participation in national and international standards setting organizations, including



Society of Automotive Engineers International (SAEI), International Electrotechnical Commission (IEC), Japan Society of Automotive Engineers (JSAE), Institute for Electrical and Electronics Engineers (IEEE), Institute of Electrical Engineers of Japan (IEEJ), European Committee of Standardization (CEN), and International Standards Organization (ISO).

Example standards of relevance to the UN Subcommittee are referenced in KFI's information paper proposing new requirements for ultracapacitors for incorporation in the UN Model Regulations.

(e) Copies of the annual or other reports of the organization with financial statements, and a list of financial sources and contributions, including governmental contributions;

**Ans.** The most up to date financial information is provided in the attached spread sheet. There have been no governmental contributions made to KFI.

(f) A list of members of the governing body of the organization and their countries of nationality;

**Ans.** The governing body of KFI is the board of directors. The board of directors as of 2008 includes:

Michael Everett, CoChairman of the Board, Maxwell Technologies Inc – United States citizen Cyrus Ashtiani, CoChairman of the Board, Chrysler, United States Advanced Battery Consortium, originally from Iran, United States citizen Steve Tsukada – Mitsui Power Systems – originally from Japan, United States citizen Takashi Tanikawa – Mitsui Power Systems – originally from Japan, United States citizen Toshi Furakawa – Nippon Chemicon – originally from Japan, United States citizen

(g) A description of the membership of the organization, indicating the total number of members, the names or organizations that are members and their geographical distribution;

**Ans.** Kilofarad International members include stakeholders across the entire supply chain, including:

- Ultracapacitor manufacturers
- Materials suppliers
- Equipment suppliers
- Industry Experts
- Universities, National Laboratories



The membership is provided in the attached spread sheet.

(h) A copy of the constitution and/or by-laws of the organization.

KFI is an affiliate of the Electronic Components Association (ECA) which in turn is part of the Electronics Industry Alliance (EIA). All three organizations are subject to the attached EIA Manual of Organization and Procedures.

(i) samples of publications of relevance to the work of the Sub-Committee

**Ans.** The information paper describing ultracapacitors and proposed transport requirements for inclusion in the UN Model Regulations illustrates how KFI is uniquely qualified to work with the Sub-Committee in developing transport requirements for ultracapacitors that will provide for their safe transport in all modes while facilitating transport of these devices that are essential for reducing green house gas emissions while meeting society's essential energy needs.

In addition to the above items you asked for a copy of registration of the organization, and an indication of the location of the permanent office. KFI is an affiliate of the ECA (Electronics Components Association (http://www.ec-central.org) located in Arlington, VA. The official address is provided on the letterhead. However, to insure documents receive proper attention, we ask that you provide communications to myself and Frits Wybenga.

We are hopeful that these documents and this information satisfy the requirements for KFI to be considered for consultative status. We are truly an international organization with more international presence than ever before. We are very interested in fulfilling a vital role for the ultracapacitor community by developing appropriate shipping and handling regulations for this device through the UN Sub-Committee.

Please let us know if you require any further information.

Sincerely,

Michael Everett Chairman of the Board

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#### kiloFarad International

#### Attachments:

- 1. Financial information spread sheet
- 2. Membership spread sheet
- 3. EIA Manual of Organization and Procedure