

KATHMANDU RESOLUTION - 2011
On Lightning Safety and Protection

We, the scientists, academics, professionals, engineers, scientific managers and social awareness promoters of the non-aligned and other developing countries and developed countries from Bangladesh, Cambodia, Croatia, India, Indonesia, Kenya, Malaysia, Mauritius, Myanmar, Nepal, Nigeria, Pakistan, Sri Lanka, Sweden, Togo, Uganda, USA and Zambia.

Thank:

- The Centre for Science and Technology of the Non-aligned and Other Developing Countries (NAM S&T Centre), Ministry of Science and Technology (MOST) of the Republic of Nepal and Nepal Academy of Science and Technology (NAST), Nepal Physical Society (NPS), Central Department of Physics, Trebhuvan University and REHDON College, the joint hosts of the International Symposium on Lightning Protection held at Dhulikhel Lodge Resort in Kathmandu, Nepal during 12-14 October 2011.
- Our respective governments and sponsors who have made our participation at this very important meeting possible.

And

Place on record our appreciation to MOST, Nepal and NAST for providing the interactive platform, excellent ambience for the meeting, fine arrangements and kind hospitality.

Realizing that there is

a marked increase in reported lightning related deaths and injuries in the world during the last few years of which the majority is in rural areas of developing countries,

an unacceptable rate of property / equipment damage and data / information losses that makes even vital systems vulnerable to failure at critical operational cycles resulting in downtime that causes significant economic impact at all levels,

a dangerous level of misinformation and unsafe lightning related products / technologies that reach the public in many countries, creating hazardous environment.

Hence emphasizing the need for scientific and technological advancement, proper engineering and technical practices, dissemination of knowledge and public awareness with respect to lightning safety and protection,

Unanimously recommend the following 3-point plan be adopted by the concerned parties in all countries and put into practice with immediate effect to minimize the injury, loss of life and property damage from lightning.

1. Governmental authorities should be informed, educated and convinced to:
 - a. Adopt and promote mandatory lightning protection standards or update and enforce existing standards, especially for government and privately owned buildings of mass gathering, high rise and high risk/defence installations, essential service such as power, telecommunication and water supply and structures of archaeological and national interest.
 - b. Institutionalize a body to make recommendations, authorizations and certifications on both locally manufactured and imported lightning protection technologies and systems.
 - c. Strongly condemn the marketing and discourage implementation of lightning protection systems rejected by International Standards (IEC).
 - d. Include essential concepts of lightning safety / protection and emergency first aid in the school curricula.
 - e. Identify lightning safety and protection as an important component in the national disaster preparedness / management programs
 - f. Issue mandates to responsible authorities for the display of appropriate lightning safety guidelines at vulnerable locations such as outdoor sports complexes and open entertainment/recreational landscapes etc.
 - g. Support the government and non-governmental organizations in promoting lightning safety and protection in the region.
 - h. Consider lightning physics and engineering as a priority area in government research funding programs.
 - i. Require appropriate bodies to develop and document a complete database on lightning strikes, death, injury and damage.

2. Non-governmental organisations should be made aware of lightning risks and encouraged to:
 - a. Develop capacity building for promoting lightning awareness and protection through training programs, media presentations and other awareness campaigns.
 - b. Organize educational and awareness programs, for different target groups and include lightning safety drills and emergency first aid training into the existing programs.
 - c. Publish information on lightning, its hazards and precautions.

- d. Enhance technical knowledge and skills among professionals dealing with lightning protection.
 - e. Require manufacturers, importers, designers and installers of protection systems to use lightning protection equipment certified to be in compliance with international standards by a government authorized body.
 - f. Educate and encourage the public to adopt scientifically validated and certified lightning protection systems.
3. Academic and research communities should be approached and requested to
- a. Develop research groups to conduct investigations on various aspects of lightning.
 - b. Develop collaborative programs and forums for exchange of information and sharing of work experience.
 - c. Facilitate access to up-to-date scientific and technical information through electronic media and other means for all professionals and concerned parties.
 - d. Organize national/international programs (on what areas/topics? Too nonspecific) in collaboration with government and non-governmental organizations.
 - e. Provide advice to manufacturers and importers of lightning protection equipment on consistency of their products with national/international standards.
 - f. Train the trainers of lightning safety and protection under various educational schemes.

The delegate from Uganda proposed the organisation of the 3rd scientific event on Lightning Protection and related topics in his country in joint collaboration with the NAM S&T Centre sometime in 2013-2014 subject to the availability of finances and approvals from the concerned authorities.

Done, this day the 14th of October 2011 at Kathmandu, Nepal.