

policy statement

The Public–Private Partnership in the Provision of Weather and Climate Services (Adopted by the AMS Executive Committee 23 July 1999)



The American Meteorological Society believes that a strong partnership between the public and private sectors in the provision of weather, climate, hydrologic, and environmental services is a critical element in the application of our science. A coordinated and cooperative sharing of responsibilities will

- enhance public safety and the protection of property,
- benefit industry and commerce,
- speed the transfer of new technologies and scientific knowledge to benefit society,
- enhance growth in the private sector and stable support for the public sector, and
- best serve the interests of users of weather and climate information.

Unprecedented progress in meteorological science and service has been achieved during the twentieth century, in part as a result of extensive public investments in research and technology. Weather forecasting has matured such that many thousands, perhaps countless, decisions are made on the basis of weather forecasts each day. Science-based predictions of climate variations up to several seasons in advance can now be made with useful accuracy, as was demonstrated during the 1997–98 El Niño episode. In parallel, a flourishing private sector has developed, providing tailored weather and climate information to individuals and organizations. The American Meteorological Society anticipates and encourages growth in this sector, as businesses and other organizations increasingly recognize the potential of such information to not only help avoid economic losses from disruptive weather, but also to exploit reliable information on nondisruptive weather to enhance economic performance.

Since the 1930s the private sector has invested extensively in the science, technology, delivery, and

marketing of value-added weather products in the United States and abroad. As a result of this investment, the private sector delivers made-to-order weather information that strengthens a business's performance in many ways. The private sector is at the forefront of developing creative products for the media that substantially improve the display and communication of weather information to the general public. Industries subject to environmental regulation by the government depend on the private sector for instruments and real-time input to critical decisions. The transportation industry improves the safety of travelers and their own on-time performance by weaving specialized information from the private sector into the fabric of their operations. These are but a few of today's market-driven innovations from the private sector that have led to the widespread application of weather information by the business community. Tomorrow's innovations will continue to expand the acceptance of the value of weather information into more and more sectors of the global economy.

In addition to the vigorous private sector, The Society also recognizes the importance of the public sector in the provision of weather and climate services for the common good. Benefits from these services to the people of the United States include the protection of life and property, an ability to cope with environmental problems, and help in making a wide range of weather- and climate-based decisions. The public sector also plays an important role in international activities involving the atmosphere, including treaty obligations such as the Safety of Life at Sea agreement, aviation protocols and procedures under the auspices of the International Civil Aviation Organization, and the World Meteorological Organization of the United Nations.

The observation and monitoring systems, which include constellations of satellites and networks of radars, buoys, aircraft, and land-based observatories, are by far the most expensive component of the infrastructure. These systems have multiple uses by sev-

eral public agencies in carrying out their missions associated with weather, climate, water resource management, environmental monitoring, and a host of other governmental responsibilities. Over the last decade, a significant public investment in this infrastructure through the modernization of the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service has proven invaluable to both public agencies and the private sector. It has resulted in dramatic gains in observing capabilities, advances in atmospheric understanding, and economically beneficial increases in forecast skill.

The public sector infrastructure—observation system, communication, data processing and computing systems, and a system for forecasts and warnings—while designed and maintained by the public sector in order to discharge its own responsibilities, is also essential to the private sector in the generation of its products and services. A vigorous and healthy partnership between the private sector and the public sector is therefore of great importance to the expanding use of weather and climate information in the United States. In the spirit of maintaining and enhancing this partnership, the AMS offers the following view of the role for each partner such that the whole is greater than the sum of its parts.

Government

It is the responsibility of NOAA to provide for use by the public of the United States, weather, climate and hydrologic information and forecasts for the entire country, including the coastal and adjacent ocean areas. The government gives priority to the provision of forecasts and warnings of severe weather, floods, and maritime conditions, and for aviation and wildfire control, which involve the protection of life and property and contribute to the safety and well being of all people.

To carry out its mission, NOAA, in cooperation with other appropriate federal and state agencies,

- maintains and continually improves a weather, climate, and hydrologic observation, communication, data processing, archive, access, and forecasting system that is required to fulfill NOAA's responsibilities;
- cooperates with the private sector to facilitate the further dissemination and interpretation of weather, climate, and hydrologic information as a

means of increasing the value of such information to society; and

- conducts, in cooperation with universities, the private sector, and other institutions, a program of research and development that continually improves the quality of products and services from both the public and private sectors.

The private sector

The private sector provides a variety of value-added meteorological products and custom-tailored weather and climate information services, which enhance the basic infrastructure, products, and services provided by the public sector. The private sector provides services to the public, and responds to meteorological needs within various economic sectors of society that are sensitive to meteorological, oceanographic, hydrologic, and environmental variations. The private sector leads in the provision of advanced technology for the improvement of the infrastructure.

The private sector performs the following functions within the public-private partnership:

- disseminates public domain weather and climate information to the public and other users, in cooperation with NOAA and emergency management organizations. In the case of situations where life and property are threatened, the private sector relays public sector warnings and advisories to the public, ensuring that a consistent, unified voice is heard by those affected citizens;
- produces and delivers valued-added weather, climate, hydrologic, and environmental products and services, and promotes their widest and most productive commercial application, to enhance the efficiency of economic sectors that are sensitive to weather and climate variations; and
- creates technological advances in observations, computing, communications, and any other areas necessary for progress in the science and application of meteorology and related aspects of oceanography and hydrology.

Partnership

Frequent and effective communication between partners is vital to a successful partnership. Both public and private sectors should strive for a teamwork

approach on such topics as public safety during hazardous weather events, where the public sector has the lead responsibility, and in the enhancing of efficiency in economic sectors sensitive to weather and climate, where the private sector has the lead. Teamwork requires good communication. The public sector should seek out feedback from universities, research institutions, and the private sector regarding their performance, including suggestions for service improvements, and the private sector, universities, and other research institutions should provide that feedback.

Summary

The American Meteorological Society strongly believes that the economic position of U.S. industries impacted by weather and climate will be well served, the private weather/climate sector will experience unprecedented growth, and the general public will continue to benefit as a result of this public-private partnership.

