

CHAPTER 13

DEVELOPED COUNTRIES

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13.1 Abstract

Survey responses from 25 Developed Countries displayed a broadly similar pattern to those from Europe but with some variations. Somewhat fewer Developed Country NMHSs draw attention to weaknesses in infrastructures, forecasting and hazard warning programmes or professional staff expertise. Fewer of them, however, have combined NMHSs and almost all have emergency contingency plans. Fewer of them perceive needs for improved coordination with neighbouring NMHSs and Regional Specialized Meteorological Centers (RSMCs). Though the NMHS or National Meteorological Service (NMS) or National Hydrological Service (NHS), as the case may be, is the sole issuer of hydrometeorological hazard warnings in a majority of Developed Countries, other competing warning services are often also available. Developed Countries' NMHSs also have relatively better capacities to provide stakeholders with value-added products. Fewer of them point to deficiencies in public and stakeholder understanding of hazards and products and more provide training to their staff and stakeholders. Furthermore, relative to Europe, a higher percentage has national disaster risk coordinating committees, generally with NMHS membership. In summary, therefore, Developed Countries NMHSs generally possess solid infrastructures and strong scientific and technical capabilities, reinforcing these through substantive training and capacity development programmes. At the same time, the above survey results suggest that improvements in partnerships, coordination, joint training with disaster authorities along with expanded outreach programmes and more widespread provision of value added services to key socio-economic sectors could enhance their contributions to disaster risk reduction.

13.2 Results of the Survey

For completeness, it was decided to briefly examine the survey responses from a representative group of Developed Countries' NMHSs to identify any common factors or anomalies that were associated with them. For the purposes of this analysis, the following countries were included in the Developed Country group: Japan, Spain, Luxembourg, Sweden, Belgium, Italy, Norway, Australia, Greece, Germany, France, Iceland, Portugal, United States, Canada, Monaco, Netherlands, Switzerland, United Kingdom, Denmark, Finland, New Zealand, Ireland, Israel and Austria. All members of the above group of Developed Countries (100% or 25 of the 25 countries) responded to the WMO country-level survey. Figure 202 below illustrates the number of Developed Countries who stated that they were affected by the specified hazards.

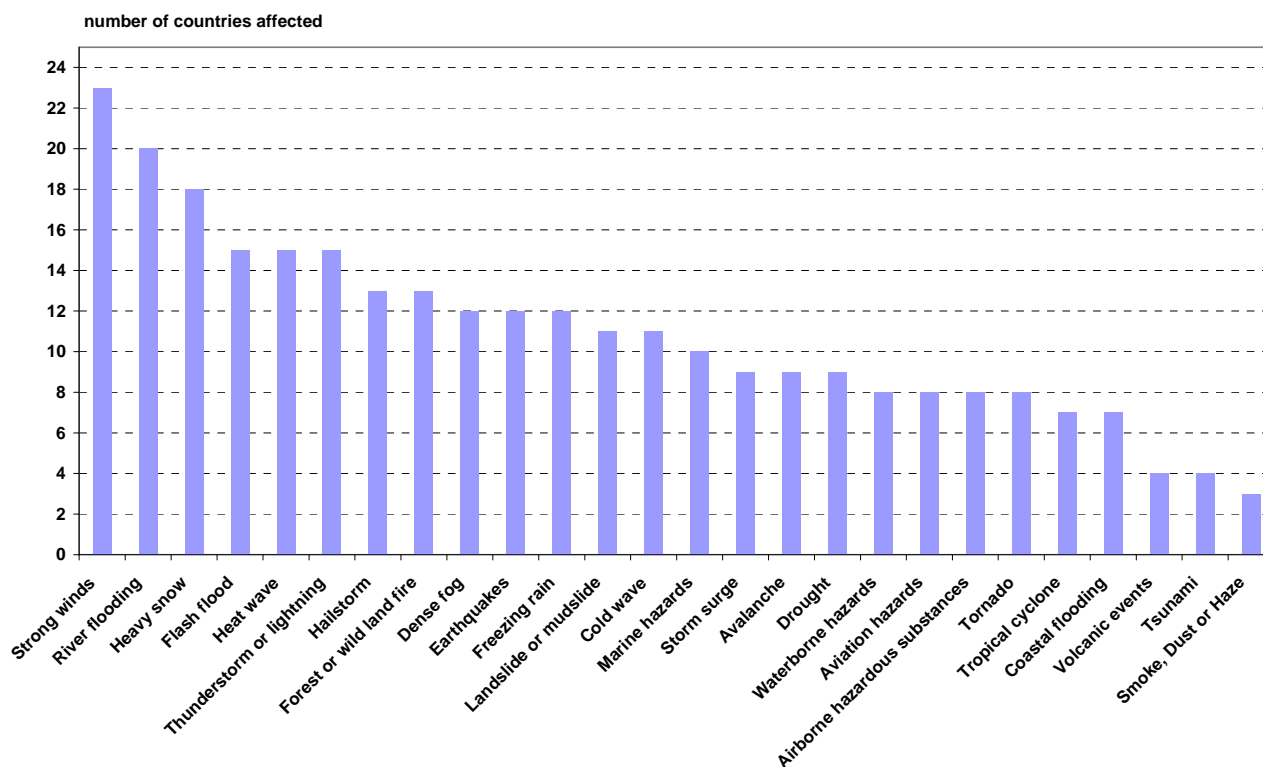


Figure 202. Number of responding Developed Countries who identified themselves as being affected by specified hazards.

As might be expected, given such a geographically distributed group of countries, a wide range of hydrometeorological hazards affected significant numbers of them. Also not surprisingly, strong winds, river flooding, heavy snow, flash floods, thunderstorms or lightning and heat waves figured prominently among the most widely occurring hazards³⁷.

Taken overall, the broad pattern of other responses from this group was rather similar to that from Europe. This also was not unexpected given that European countries comprised a large proportion of the Developed Countries included in the group. There were, however, some noteworthy variations from that overall pattern in the following areas. While endorsement of the benefits for disaster risk reduction of provision of value-added services based on hazard databases was at the European level, responses from the Developed Countries indicated that the latter were less limited in their ability to contribute to that priority by quality assurance, archiving and updating, customization of data products and availability of trained staff. Legislative and governance areas generally displayed the European pattern but with a higher percentage of Developed Countries indicating that they had national coordinating committees for disaster risk reduction. Where NMHSs contributions to disaster risk reduction were concerned, noticeably fewer Developed Country responses advocated implementation of national “readiness” systems. Only about one quarter of Developed Country respondents indicated that they had a combined NMHS as opposed to roughly one half in the case of Europe.

In relation to NMHS infrastructure, warning and forecast capacity, and products and services, the Developed Country responses were again broadly consistent with those from Europe but with some variations in emphasis. Survey responses from the Developed Country group revealed fewer weaknesses in observational networks, telecommunications and informatics, network

³⁷ The survey responses do not provide information on the magnitudes of the impacts associated with individual hazards, simply that they occur in the reported number of countries.

infrastructures and professional staff capabilities and in the forecasting and warning areas. Furthermore, significantly lower percentages of Developed Country NMHSs cited applications software, computers, network equipment, or Internet access as factors limiting their contributions to disaster risk reduction. Moreover, a lower percentage believed that upgrading operational warning and forecast services would enhance their contributions to disaster risk reduction. In addition, almost all Developed Countries' NMHSs had a contingency plan in place to maintain their services in emergencies.

The survey responses from Developed Countries summarized in Table 12 of Annex 4 illustrate that, in most instances, warnings of hydrometeorological hazards were issued by National Meteorological Services (NMS). However, river flooding, flash floods, coastal flooding and waterborne hazards represented exceptions where combined NMHSs and NHSs, taken together, issued as many or more warnings for these phenomena. In addition, less than half of the Developed Country warnings for the most common hazards included information on the potential impacts of the hazard. Responses also indicated that, while the NMS, NMHS, or NHS was the sole issuer of warnings in a majority of these Developed Countries, other competing warning services were frequently available.

A somewhat lower percentage of Developed Countries NMHSs than in Europe generally felt that a lack of public and stakeholder understanding of hazards and NMHS products was a limiting factor or endorsed the benefits of educational modules for these outreach targets. Conversely, a somewhat larger proportion of Developed Country respondents provided relevant training to NMHS staff and stakeholders. Developed Country respondents, as a group, also displayed noticeably lower levels of concern regarding the need for NMHS visibility and improved understanding by government authorities of the value of their services. In addition, their responses indicated less need to enhance coordination with neighbouring NMHSs and with RSMCs. On balance, therefore, the responses from Developed Countries' NMHSs, perhaps not unexpectedly, reflected better infrastructures and stronger technological and scientific capacities in relation to their abilities to contribute to disaster risk reduction, reinforcing these capabilities through substantive training and capacity development programmes. At the same time, survey responses drew attention to some areas where improvements could be made that would enhance NMHSs contributions to disaster risk reduction. These include strengthening of partnerships and coordination with stakeholders, increased emphasis on outreach and joint training with disaster authorities and expanded provision of value added services to key socio-economic sectors.