SOCIO-ECONOMIC BENEFITS OF
METEOROLOGICAL AND HYDROLOGICAL SERVICES

INVENTORY OF DECISION SUPPORT TOOLS

ITEM	DESCRIPTION
Sector	Transport
Sub-sector	Public transport operators
Tool Name	Tropical Cyclone Warning Signal Assessment Form
Tool Description	The tool provides updated assessment of the probability of tropical cyclone warning signals to public transport operators through the Transport Department of the Hong Kong Special Administrative Region Government to assist them in planning and managing resources to cope with the surge of traffic upon the issuance or cancellation of the tropical cyclone signal No.8 in Hong Kong during tropical cyclone situations.
Weather, Climate or Water inputs	Real-time meteorological data, numerical model outputs and climatological data relevant to tropical cyclone forecasting.
Specific weather, climate, water data required	Local wind data, tropical cyclone intensity and positions, the statistical relationship between tropical cyclone intensity, distance of the tropical cyclone from Hong Kong and local climatological wind data. Tropical cyclone position forecasts and the associated uncertainties were derived from multi-model ensemble forecasts.
Spatial resolution	Point data
Temporal resolution	1 - 6 hours
Delivery methodology	Real-time observations and global model data retrieved via the Global Telecommunication System (GTS) and the Internet. Historical data and regional model data are available in-house.
Frequency of data requirement	6 hourly; 3 hourly if situation warrants
Other	Nil
Detailed Tool Description	Probability assessment of tropical cyclone signal change, viz. low / medium / high chance of signal change, will be given to users in a standard form at pre-agreed times with updates as necessary. Users may utilize the information

		to decide activation of their response plans in case of a high or medium chance of signal change.
	Spatial resolution	Whole territory of Hong Kong
	Temporal resolution	1 - 6 hours
	Delivery methodology	a standard form delivered via fax as pre-agreed with users
	Frequency of provision	4 times a day, more frequent as situation required.
	Other	Nil.
Benefits of tool application		The update assists public transport operators in their planning for the suspension and resumption of transport services in tropical cyclone situations based on cost-loss and risk assessments. It also helps the Transport Department to regulate the demand for road traffic and sea transportation and minimise traffic chaos by enhancing the coordination with public transport operators during tropical cyclone situations.
Possible future advances		Refining the category of probability will be explored if users consider it necessary for their risk assessment.
Comments		Nil
URL		Nil
Other		Nil