

# WWMIWS functional requirements for SafetyNet2

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# Purpose

- Describe operational characteristics of WWMIWS
- Outline the High level requirements for SafetyNet2 relating to machine to machine transfer; backup; and monitoring.
- Provide additional functional requirements for each High Level requirement

# Operational characteristics

- 99.9% of products are automatically delivered directly from the forecaster to the LES.
- All forecasts and warnings are configured with pre-set EGC codes
- Very rarely are we required to issue products manually (i.e. in backup mode)
  - EGC codes are generally stated in SOPs for backup delivery

# Types of message used

## Routine forecasts (scheduled)

- MetArea option (for small domains), or Rectangular option (for larger domains)

## Tropical Cyclones (unscheduled)

- Circular option with centre fixed on position of Tropical Cyclone

## Wind warnings (unscheduled)

- Rectangular option, circular option, MetArea (for small domains)

# High level requirements

## Essential

- Machine to machine transfer between Met service to Inmarsat

## Desirable

- Remove need to transmit to individual satellites in overlapping footprints
- Backup capability for manual transmission via internet
- Monitoring capability via internet

# Machine to machine requirements

- Ability to send message to MetArea, circular area, rectangular area
- Ability to specify urgency option for wind warnings above 64 knots
- Ability to send messages for immediate transmission at scheduled time slot
- Ability to transfer message to Inmarsat through online methods
- Optional – ability to send message to Inmarsat for transmission according to schedule at a later time

# Backup requirements

- Very rare frequency of backup arrangements needed, and therefore use of the SafetyNet2 web interface.
- No specific needs for customisation of the interface.
  - Instructions would be developed to guide forecasters to the appropriate screens and skip others.

# Monitoring requirements

- Notification if product is corrupted
  - Canada compare the bit size of files transmitted vs received as a proxy for corruption or partial delivery
- Notification if product not transmitted by set time (due to problem at Inmarsat or Met office)
- Web interface to inspect products occasionally