

International Civil Aviation Organization



FIFTH MEETING OF THE ASIA/PACIFIC METEOROLOGICAL REQUIREMENTS WORKING GROUP (MET/R WG/5) OF THE ASIA/PACIFIC AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (APANPIRG)

Bangkok, Thailand, 19 – 21 April 2016

Agenda Item 5: Coordination between MET and ATM services

AVIATION CONTINGENCY PLAN

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SUMMARY

This paper presents the provision of contingency arrangements in Australia between the Bureau of Meteorology and Airservices when dealing with outages and disruptions in services.

1. INTRODUCTION

1.1 The Australian Bureau of Meteorology (Bureau) in consultation with Airservices Australia (Airservices) has developed a contingency plan pertinent to the delivery of aviation weather products and services.

1.2 These contingency plans set out how the Bureau will operate during a contingency situation. In particular, the plan provides details on specific incident procedures and guidance to ensure that the delivery of aviation products and services are maintained to an agreed level. These include:

- A degradation or loss of power and/or communication systems, such as forecasting software systems, network failure, communication and/or dispatch outages;
- Inadequate staffing due to an emergency situation, such as evacuation of Bureau offices or issues with the physical access to the Bureau offices; and
- Loss of critical infrastructure, such as problems with automatic weather station (AWS), aerodrome weather information Service (AWIS) or weather radar information.

1.3 This paper outlines a framework to determine which products & services will continue to be produced under contingency conditions, and which products & services may be temporarily suspended or transferred to another Bureau office.

1.4 In addition, the paper outlines the arrangements made with Airservices for dealing with extreme outages.

2. PRORITIES DURING AN EMERGENCY

2.1 In order to determine which products and services will continue to be produced in an emergency situation and which products and services will be temporarily suspended or transferred to another Bureau office, aviation products and services are divided into three tiers. The following tiers are intended to indicate major categories of products and services to be provided to industry and may need to be adapted, depending on the availability of staffing and capability.

- **Tier 1** products are essential products and services and will continue to be produced by the Bureau during an emergency situation.
- **Tier 2** products are non-essential but higher priority products and services and will be transferred from the Bureau office affected by the emergency to another Bureau office which has the capability to produce the products and services. Consideration will be given by the receiving office to temporarily suspend Tier 3 products and services in their area of responsibility in lieu of the additional responsibility for Tier 2 products and services. When there is no capacity to transfer responsibility for Tier 2 products and services to another Bureau office, e.g. when an emergency situation affects much of or the whole Australian region, Tier 2 products and services may also be temporarily suspended.
- **Tier 3** products are non-essential lower priority products and services that will be temporarily suspended in Bureau offices directly affected by an emergency situation.

2.2 The table below provides an outline of the products and services included in each tier.

TIER 1 – ESSENTIAL	TIER 2 – HIGH PRIORITY	Tier 3 – LOWER PRIORITY
<ul style="list-style-type: none"> • Ditching Report and briefing • Volcanic Ash Advisory • Tropical Cyclone Advisory • AREA QNH • TAF Cat A¹ • SIGMET • AIRMET² • Search and Rescue Forecast and briefing • Aerodrome Warning Cat A • Wind Shear Warning Cat A • NOTAM (when AWS or AWIS is issuing incorrect data). • NOTAM (when notifying change of service). • Area Forecast³ • TAF requested in support of emergency operations. • Manual Observations at the selected sites⁴ 	<ul style="list-style-type: none"> • SIGWX Medium • TAF Cat B • TAF Cat C 	<ul style="list-style-type: none"> • TTF • Aerodrome Warning Cat B • Wind Shear Warning Cat B • Aerodrome Warning Cat C • TAF Cat D • Route Forecast • Flight Forecast • Airport Weather Briefing & Code Grey • SIGWX High • Weather briefing – non-emergency, including face-to-face, telephone and email. • NOTAM (when notifying incomplete AWS or AWIS data) • METAR/SPECI • MET CDM

Table 1: Service Priorities in an Emergency Situation

¹TAF Amendments (for deterioration) shall be done first.

²AIRMET are not required to be issued during those periods when an ARFOR is not valid for the relevant area.

³Area Forecasts are not amended in an emergency situation if time does not permit.

⁴Manual Observations provided either by ATC (Air Traffic Controllers) or the Bureau's Authorised Observer to support the production and weather watch of TAFs at selected sites.

3. PRORITIES DURING AN EXTREME OUTAGE

3.1 The Bureau has redundancy in communications systems that would cover most eventualities. However, in the event of an incident where this redundancy is insufficient or is unforeseen, the dispatch of products via the Bureau's Communication Message Switching System (CMSS) may not be possible.

3.2 During such outages, the Bureau may not be able to send aviation products via approved means, such as Aeronautical Fixed Telecommunication Network (AFTN) and therefore aviation products will need to be e-mailed or faxed to Airservices.

3.3 Given the constraints, aviation forecasters may not have capacity to undertake all Tier 1 products (as per **Table 1**) or Airservices may not have the capacity to ingest manually derived forecast products into their systems. Therefore, the Bureau would only produce a streamlined version of Tier 1 products and services, as outlined in **Table 2**, and suspend all the other products.

3.4 This arrangement may also be established during another situation, such as a pandemic where the Bureau may be required to operate with a bare minimum of essential personnel.

Products and Services to be continued during an extreme outage

- NOTAM (when notifying change of service)
- Ditching Report and briefing
- Volcanic Ash Advisory
- Tropical Cyclone Advisory
- AREA QNH
- TAF¹ – YBBN, YBCG, YBCS, YMHB, YMML, YPAD, YPDN, YPPH, YSCB and YSSY.
- SIGMET
- Search and Rescue Forecast and briefing
- TAF requested in support of emergency operations.
- TAF requested by Airservices which are operationally significant
- Manual Observations² at YBBN, YBCS, YMHB, YMML, YPAD, YPDN, YPPH, YSCB and YSSY.

Table 2: Services Priorities in an Extreme Outage

¹TAF Amendments (for deterioration) shall be done first.

²Manual Observations provided either by ATC (Air Traffic Controllers) or the Bureau's Authorised Observer to support the production and weather watch of the selected TAFs.

4. ACTION REQUIRED BY THE MEETING

4.1 The meeting is invited to:

- a) note the information contained in this papers; and
- b) discuss any relevant matters as appropriate.
