

## MET DEFICIENCY SAMPLE 1

DEFICIENCY (HAZARD) IDENTIFICATION AND RISK ASSESSMENT REPORT	
<b>1. Description of identified deficiency:</b>	A properly organized quality system comprised of procedures and resources necessary to provide for the quality management of the meteorological information supplied for international air navigation has not been established by MET Office.
<b>2. State/Territory/Organization:</b>	Name of State/Territory/Organization
<b>3. Report N°:</b>	MET XXX CAR
<b>4. Date of identification:</b>	20/06/2012
<b>5. Report prepared by:</b>	ICAO MET Regional Officer
<b>6. Air Navigation Area Facility/service involved:</b>	CAA and the MET Office
<b>7. Specific requirement:</b>	The CAA should ensure that the Meteorological Office establishes a properly organized quality system including procedures and resources necessary to implement this system.
<b>8. Potential consequences of the hazard caused by the deficiency:</b>	The CAA Office should ensure that the Meteorological Office establishes a properly and implements a properly organized quality management system (QMS) in order to avoid the affectation to the provision of meteorological service for international air navigation.
<b>9. Mitigation currently implemented (if known):</b>	The State started the processes to implement a quality system in aeronautical meteorological, since it became a Standard, however, budgetary limitations has hampered the implementation of the system.
<b>10. Remarks:</b>	This has been a requirement that became a Standard in 2012 and the State should make the effort to establish and implement it.
<b>11. Report prepared by: (ICAO Officer)</b>	ICAO MET Officer
DEFICIENCY (HAZARD) IDENTIFICATION AND RISK ASSESSMENT REPORT (CONT.)	
	<b>RISK SEVERITY</b>

		Catastrophic A	Hazardous B	Major C	Minor D	Insignificant E
<b>RISK LIKELIHOOD</b>	Frequent 5	5A	5B	5C	5D	5E
	Occasional 4	4A	4B	4C	4D	4E
	Remote 3	3A	3B	3C	3D	3E
	Unlikely 2	2A	2B	2C	2D	2E
	Extremely Unlikely 1	1A	1B	1C	1D	1E
5A, 5B, 5C, 4A, 4B, 3A		<b>Intolerable region (equivalent to U-priority deficiencies)</b> Unacceptable under existing circumstances				
5D, 4C, 4D, 3B, 3C, 2A, 2B, 5E, 2C, 4E, 3D		<b>Tolerable region (equivalent to A-priority deficiencies)</b> Acceptable, based on risk mitigation. Might require a managerial decision,				
1A, 1B, 1C, 1D, 1E, 2E, 3E, 2D		<b>Acceptable region (equivalent to B-priority deficiencies)</b> Acceptable				
<b>Likelihood</b>		Is defined as the likelihood of occurrence of an event or unsafe condition				
<b>Frequent:</b>		•Likely to occur many times (has occurred frequently)				
<b>Occasional:</b>		•Likely to occur some times (has occurred infrequently)				
<b>Remote:</b>		•Unlikely, but might occur (occurs rarely)				
<b>Unlikely:</b>		•Very unlikely to occur (no occurrence is known)				
<b>Extremely unlikely</b>		•Almost unconceivable that the event may occur.				
<b>Severity:</b>		Is defined as the possible consequence of an event or unsafe condition, based on the worst case scenario				
<b>Catastrophic</b>		<ul style="list-style-type: none"> <li>•Destroyed equipment</li> <li>•Multiple deaths</li> </ul>				
<b>Hazardous</b>		<ul style="list-style-type: none"> <li>•An important reduction in safety margins, physical damage or a workload such that operator can not perform their tasks in a precise and complete manner.</li> <li>•Serious injury</li> <li>•Major damage to equipment.</li> </ul>				
<b>Major:</b>		<ul style="list-style-type: none"> <li>•A significant reduction in safety margins, a reduction in the ability of the operator to respond to adverse operating conditions as a result of an increased workload or as a result of conditions hindering its efficiency</li> <li>•Serious incident</li> <li>•Injury to individuals</li> </ul>				
<b>Minor:</b>		<ul style="list-style-type: none"> <li>•Interference</li> <li>•Operational limitations</li> <li>•Use of emergency procedures</li> <li>•Minor incidents</li> </ul>				
<b>Insignificant</b>		<ul style="list-style-type: none"> <li>•Slight consequences</li> </ul>				

<b>RISK MITIGATION RECOMMENDATIONS REPORT</b>				
<b>1. Description of identified deficiency:</b>	The MET Office has not established a quality management system in aeronautical meteorology, therefore the State should make an effort to provide the funds so a properly QMS-MET including procedures and resources necessary to implement the system, according to Annex 3, Chapter 2, paragraphs 2.2.1, 2.2.2 and 2.2.3, CAR/SAM ANP FASID, Vol II,			
<b>2. State/Territory/Organization:</b>	Name of Sate/Territory/Organization			
<b>3. Report N°:</b>	MET XXX CAR			
<b>4. Date of identification:</b>	30/06/2012			
<b>5. Level of risk before mitigation measures are adopted:</b>	2C - Acceptable, based on risk mitigation. Might require a managerial decision,			
<b>6. Solution # 1</b>				
<b>7. Description of the solution:</b>	Establish and implement a properly QMS-MET system.			
<b>8. Estimated cost and time for implementation of this solution:</b> <u>\$ 30,000</u> <u>3 months</u>	<b>9. Revised risk assessment if <u>only</u> this solution is to be implemented:</b>	<b>10. Probability:</b>	2	Unlikely
		<b>11. Severity:</b>	C	Major
		<b>12. Level of risk:</b>	2C	Acceptable
<b>13. Potential implementation problems:</b>	Even though the cost of establishing this QMS –MET system is relatively low, however, for most MET Offices due to their highly restricted budget, the implementation has become a problem.			
<b>14. Solution # 2</b>				
<b>15. Description of the solution:</b>	The implementation of the QMS-MET will contribute towards the operational safety and efficiency of international air navigation.			
<b>16. Estimated cost and time for implementation of this solution</b> <u>Provision of the funds by the CAA, 6 months</u>	<b>17. Revised risk assessment if <u>only</u> this solution is to be implemented:</b>	<b>18. Probability:</b>	2	Unlikely
		<b>19. Severity:</b>	C	Major
		<b>20. Level of risk:</b>	2C	Acceptable
<b>21. Potential implementation problems:</b>	To seek the appropriate amount of funds necessary to implement this QMS-MET system.			

1.



**MET DEFICIENCY SAMPLE 2**

<b>DEFICIENCY (HAZARD) IDENTIFICATION AND RISK ASSESSMENT</b>	
<b>1. Description of identified deficiency:</b>	It was noted that there is a draft letter of agreement (LoA) prepared by the MET Office. However, the formal letter has not been presented to the pertinent authorities.
<b>2. State/Territory/Organization:</b> Name of State/Territory	
<b>3. Report N°:</b>	MET XXX CAR
<b>4. Date of identification:</b>	15/05/2012
<b>5. Report prepared by:</b>	ICAO MET REGIONAL OFFICER
<b>7. Potential consequences caused by the deficiency:</b>	The lack of having this letter of agreement between the MET and the air traffic services units does not allow both parties to have a documents that will support their complain in case a Unit decides not to go ahead with the responsibilities and the provision of the necessary information.
<b>8. Specific requirement:</b>	Establish a formal letter of agreement between the ATS and MET units to ensure the adequate MET information exchange required for the provision of meteorological and air traffic control services for international air navigation, considering the need for local routine and special reports in accordance with Annex 3, Chapter 4, paragraph 4.2 .
<b>9. Mitigation currently implemented (if known):</b>	None
<b>10. Remarks:</b>	The MET Office and the ATS authorities shall take action to resolve this deficiency.
<b>11. Report prepared by: (ICAO Officer)</b>	ICAO MET Regional Office



**RISK MITIGATION RECOMMENDATIONS REPORT**

<b>1. Description of identified deficiency:</b>	It was noted that there is a draft letter of agreement (LoA) prepared by the MET Office. However, the formal letter has not been presented to the pertinent authorities.			
<b>2. State/Territory/Organization:</b>	Name of State/Territory			
<b>3. Report N°:</b>	MET XXX CAR			
<b>4. Date of identification:</b>	12/03/2012			
<b>5. Level of risk before mitigation measures are adopted:</b>	2C Acceptable, based on risk mitigation. Might require a managerial decision.			
<b>6. Solution # 1</b>				
<b>7. Description of the solution:</b>	The MET Office and the air traffic services authorities should coordinate the necessary actions in order to establish a letter of agreement between themselves.			
<b>8. Estimated cost of this solution:</b>	<b>9. Revised risk assessment if <u>only</u> this solution is to be implemented:</b>	<b>10. Likelihood:</b>	2	Unlikely
Proper coordination between the parties		<b>11. Severity:</b>	C	Major
		<b>12. Level of risk:</b>	2C	Acceptable.
<b>13. Potential implementation problems:</b>	None			