CGMS Agency Best Practices in support to DCP Data Access

Endorsed by CGMS-48, 25 May 2020

Document Change Record

Issue / Revision	*Date*	*DCN. No*	*Summary of Changes*
Version 1	25 May 2020		Initial version.

TABLE OF CONTENTS

1. INTRODUCTION

This document presents the CGMS agency best practices (BP) in support to DCP data access for Satellite Operators offering Data Collection Services (DCS) to Users.

This version mainly focuses on the provision of DCS data via the Internet. This global set of Best Practices on DCS data access provides a basis for the Satellite Operators to offer solutions that allow the DCS Data Users, DCP Operators and the DCP Transmitter Manufacturers to make the most effective use of the system.

2. BEST PRACTICES

Each of the following Best Practices are already used by at least one of the Satellite Operators offering DCS.

2.1 BP.01 DCS DATA AVAILABILITY VIA THE INTERNET

For the Data Collection Services to serve the DCS Data User community most effectively, it is essential that Satellite Operators make DCS data available via the Internet.

Best Practice BP.01: *Satellite Operators offering DCS should make all the DCS data available via the Internet on a DCS Web Service.*

2.2 BP.02 DCS DATA AVAILABILITY ON THE WMO GTS

For the Data Collection Services to serve the DCS Data User community most effectively, it is essential that Satellite Operators make DCS data available on the WMO GTS.

Best Practice BP.02*: Satellite Operators offering DCS should make all the DCS data globally available on the WMO GTS.*

2.3 BP.03 CONTIDIONS OF DCS DATA ACCESS VIA THE INTERNET

Since DCS data on the GTS is available globally, there is no need to restrict the access of DCS data via the Internet to a particular set of users or geographical regions. Access to the DCS Web Services is usually controlled, but once a user has access to the DCS Web Service they should be allowed to access all DCS data within the system.

Best Practice BP.03*: Satellite Operators offering DCS should ensure their DCS Web Service makes all DCS data within their system available to a valid registered user.*

2.4 BP.04 HIGH DCS DATA AVAILABILITY

For the Data Collection Services to be reliable, it is important that the Satellite Operators ensure high DCS data availability. This means the Satellite Operator should ensure robust data provision and be able to detect and recover problems with the service with minimum delays. Various mechanisms to ensure this could be put in place, such as monitoring the 24/7 availability of the services and avoiding single points of failure.

Best Practice BP.04*: The Satellite Operators offering DCS should ensure high DCS data availability and put in place mechanisms to be able to detect and recover problems with the service with minimum delays.*

2.5 BP.05 DATA LATENCY

For the Data Collection Service to successfully support the various applications DCP Transmitters are used for, it is important to make the DCS data available on the DCS Web Service as soon as possible.

Best Practice BP.05*: The Satellite Operators offering DCS should ensure DCS data are made available on the DCS Web Service as soon as possible.*

2.6 BP.06 DCS DATA ARCHIVE

For the Data Collection Service to offer flexibility in DCS data access, it is important to archive the DCS data. The DCS data archives should be sized according to user's applications requirements and be expandable to cope with the evolving user needs. Regular interactions with users are necessary to ensure the appropriate size of the DCS data archive.

Best Practice BP.06*: The Satellite Operators offering DCS should provide an on-line DCS data archive, which is sized according to user's applications requirements and expandable to cope with evolving user needs.*

2.7 BP.07 TAILORED DCS DATA ACCESS

For the Data Collection Service to offer flexibility in DCS data access, it is important that the Satellite Operator ensures the DCS Web Service offers the possibility for tailoring DCS data retrieval. This could include the capability to download one or more DCPs with one or more addresses for a selection of time criteria.

Best Practice BP.07*: The Satellite Operators offering DCS should ensure their DCS Web Services offer the possibility for tailoring DCS data retrieval.*

2.8 BP.08 USER NOTIFICATIONS

As part of the provision of a high availability Data Collection Service, it is important to inform the DCS Data Users of any service changes and issues, which impact the access to DCS data (e.g. delays, outages). This could be via email or directly in the DCS Web Service.

Best Practice BP.08*: The Satellite Operators offering DCS should put in place mechanisms to notify the DCS Data Users of any service changes and issues, which impact the access to DCS data (e.g. delays, outages). The information provided in the notification should be as detailed as possible, including the extent of the impact, expected duration of the impact, etc. Updates to the notifications should be issued regularly and a final notification should be sent to confirm return to nominal service.*

2.9 BP.09 UP-TO-DATE RECORD OF DCP OPERATOR CONTACT INFORMATION

For the successful maintenance of the Data Collection Services, it is important to maintain an up-to-date record of the DCP Operator's contact information. This ensures that in cases of issues with the DCP transmission DCP Operators can be contacted and impact on other DCS users can be minimised. This could be achieved through ensuring the DCS Web Services allows the DCP Operators to log in and update their contact information.

Best Practice BP.09: *The Satellite Operators offering DCS should ensure their DCS Web Services allows easy maintenance of up-to-date record of the DCP Operator's contact information by the users.*

2.10 BP.10 DCS DATA ACCESS DOCUMENTATION

To make the Data Collection Service accessible, it is important to make the appropriate DCS Data Access documentation available to the DCS Data Users. This documentation should be linked from the DCS Web Service.

Best Practice BP.10*: The Satellite Operators offering DCS should provide the DCS Users with a full set of DCS Data Access documentation, accessible through the DCS Web Service.*