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## **FINANCIAL AND SKILLS SUPPORT FOR THE REFERENCE CDMS TOOL SET**

This document will become Document 6.1(5) for the 2019 workshop.

**REVIEW COMMENTS**

<b>Version / No</b>	<b>Reviewer</b>	<b>Issue</b>	<b>Notes</b>	<b>Response</b>
0.1/1	Stuber	Para 1.1. The OpenCDMS may need some very new technology and competencies that are not available in NMHS or with our traditional collaborators. High level IT engineer (modellers, programmers) will surely be needed, especially at the beginning for the core. For those we will have to pay!		Amended para 1.2

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### **Regulation 43**

Recommendations of working groups shall have no status within the Organization until they have been approved by the responsible constituent body. In the case of joint working groups the recommendations must be concurred with by the presidents of the constituent bodies concerned before being submitted to the designated constituent body.

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# **FINANCIAL AND SKILLS SUPPORT FOR THE REFERENCE CDMS TOOL SET**

## **1 NEEDS FOR FINANCIAL AND SKILLS SUPPORT**

*Note: for brevity, the reference CDMS tool set is referred to as OpenCDMS in what follows and the project as the OpenCDMS project*

1.1 As an open source project, OpenCDMS will be delivered mainly by volunteer contributors. Some of those individuals will contribute in their personal time, and others will be assigned by their employers to contribute to the project. OpenCDMS will need to solicit those contributions.

1.2 Inevitably, there will be some aspects of OpenCDMS that are considered to be critical for the success of the project for which there are insufficient voluntary contributions available, or perhaps the volunteer community does not possess the skills needed to support the type of development required. Even though OpenCDMS will not itself manage financial resources or contracts that consume them, it needs to have arrangements in place to give it access to additional resource when needed. This document describes how OpenCDMS will work with WMO to allow the project to continue if there are insufficient volunteer contributors to complete essential tasks.

## **2 ENCOURAGING CONTRIBUTIONS**

2.1 Most organizations and individuals will see software coding skills as the most important resource for the project. That is largely true, but the project will also need good, user-friendly documentation and technical and scientific reviews of its designs, specifications and products.

2.2 OpenCDMS needs clear, ongoing communications to encourage contributions to and use of the OpenCDMS software. These communications must emphasize the aims of OpenCDMS, its progress towards meeting those aims, success stories of those using OpenCDMS, and the ongoing needs for contributions with examples of what is needed. Running such a communications plan requires skills that are not normally associated with software developers, emphasizing again that OpenCDMS needs to attract contributors other than code developers.

## **3 WMO AS A FUND CONTROLLER**

3.1 WMO has an established mechanism for receiving, managing and spending voluntary financial contributions through trust funds or special accounts. Not all the organizations that wish to contribute to the development of OpenCDMS may be able to release the developer skills needed by the project, but they may be able to make a financial contribution.

3.2 Complementing WMO's ability to manage voluntary funds is its (and its Members') lack of direct control over the OpenCDMS project because decisions on the OpenCDMS project are by the individual contributors to the project.

3.3 By controlling voluntary funds, WMO will be in a position to make sure that what it considers to be critical elements of CDMS are developed by paying developers for their time. Provided that the developers paid by WMO act as full members of the OpenCDMS contributor community, including allowing others to review, comment on and contribute to the code they are developing, the developers paid by WMO would be able to prepare the critical elements that would not have been delivered on the same timescale.

3.4 WMO should not use the voluntary funds it manages to pay for development of components of OpenCDMS that would have been developed by volunteer contributors, and should take advice from the OpenCDMS management team on whether support from WMO is needed for a release. Not only does this conserve the voluntary funds so that they are available to solve the really difficult resourcing problems, but it places WMO in the position that it is perceived by other contributors to the project as helping them achieve their goals, rather than as WMO dictating what should be done.

3.5 The voluntary funds (trust fund or special account) should be managed by WMO acting on the advice of the OpenCDMS management team and the management group of the Commission on Observations, Infrastructure and Information Systems.