# User interface for Global Campus

(Note: Relevant to TT-GISC agenda item 10, and ET-WISC agenda item 5.7)

## 1. Background

The WMO Global Campus feasibility study was recommended by the WMO Executive Council EC-66 in June 2014 in order to help, through increased collaboration and cooperation, ways to assist with the increasing and the changing needs of education and training of Members.

A WMO Global Campus steering committee was formed to lead and investigate a number of elements of the feasibility with a key one being to investigate

* *“options to develop a trial Global Campus registry of resources and activities, exploiting where possible an existing registry, and exploring how the Global Campus could utilize the capabilities of WIS”*

As well as

* *“Establishing basic criteria for partners and providers to list resources and activities on the registry………….”*

The ability to view all WMO education and training offerings through a “global searchable calendar” could bring many benefits for those wishing to undertake or develop education and training, e.g. by making courses easier to find and perhaps apply for, as well as being able to find resources and/or see where collaborative developments may extend the reach of the offerings or indeed reduce duplication.

## 2. Work done so far

The WMO Global Campus Steering Committee used a series of methods to sample the user needs of the WMO Education and Training community.

The user needs showed that the WMO Education and Training community want the features and functionality more akin to a Learning Management System (LMS), thus not only showing events currently on offer (a Calendar), but also being able to view all possible resources whether scheduled or not (a Catalogue) and additionally providing access to the learning resources (a Repository).

The WMO Global Campus steering committee decided that the calendaring aspect was the priority and that 3 prototypes, all building on existing infrastructure, should be investigated, those being:

1. Calendar from Moodle database activity (Moodle being an open-source learning platform, widely used in the ETR community)
2. Development of the WMO Vlab calendar (hosted by Eumetsat)
3. A calendar built on the metadata contained in WIS

It then became necessary to define the difference between a *calendar* and a *searchable calendar*, i.e.

* A ***calendar*** is best suited to show one time and regular events, it will show events available for a period of time in advance of the current date.
* A ***searchable calendar*** adds filter and search criteria to assist users searching for appropriate events.

It also became necessary to state that the above does not predicate what the user interface should look like.

In regards to option 3 above, “a calendar built on the metadata contained in WIS”: in late 2015 COMET demonstrated the ability to use the WIS system to list the MetEd catalogue of content.

## 3. WIS/COMET demonstration

The WIS/COMET demonstration can be accessed on

<http://giscportal.washington.weather.gov/openwis-user-portal/srv/en/main.home>

By conducting a search using the following term: UCAR-TEST

This demonstration was made possible through the use of an existing UCAR-hosted Open Archive Initiative (OAI) server that is compatible with the WIS harvesting process.

Initial feedback on this was “*Without access to such an Open Archive Initiative (OAI), COMET would have had to custom build an OAI, which would have called for a significant investment in programming. This step just showed that it was possible to connect one of the WMO community databases to the WIS system using the standard WIS metadata; it did not address the additional metadata and then harvesting routines that would be required to build a date based listing of courses. The WIS option, whilst possible, would need to be developed from scratch with the need for extensive discussion with the WIS group on metadata protocols and implementation details”*

However, further to discussion within the secretariat, the need for an OAI to get training Metadata to WIS has now been explored further, so whilst it is useful for those maintaining large amount of (training offerings)/Metadata (MD), it is not needed for smaller Metadata owners (smaller training centres), E.g. the possible options to get Metadata to GISC were suggested as follows:

1. Large upload – Can use OAI (if you have it), best for large uploads & is therefore a good approach if you have a lot of data you wish to personally maintain.
2. Batch upload – Edit on own desktop and upload through GISC interface (using a GISC web form, email or ftp)
3. Individual upload – ftp, email or via GTS (ftp easier, note some GISCs might not support email)
4. Create, edit of delete MD on GISC web form

All GISCs have OAI and all synchronize with each other, so even if the Metadata for training offerings could only be uploaded to one GISC, the Metadata would appear through all GISC when synchronized.

The above and the associated discussions have confirmed that there is good scope to use WIS, further to fuller investigations.

## 4. Next steps

Whilst the EC Panel decided that the Moodle option (Prototype 1 above) should be pursued and become operational during 2016, a longer term solution of WIS should be investigated.

For information, the prototype of the Moodle searchable calendar can be seen at the following link <http://moodle.wmo.int/course/view.php?id=10>

The EC Panel of ETR will propose the following request EC -68

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| THE EXECUTIVE COUNCIL,  **Considering** the need to improve Members access to information on the availability of education and training resources and events to support their human resource development planning and to take advantage of existing WMO systems and processes.  **Acknowledges** the work of the WMO Global Campus steering committee on the Global Searchable Calendar including investigation of possible extension of the WIS to support the Global Searchable Calendar activities;  **Recalls** Resolution 16 / EC-66 and Resolution 53 / Cg-17 regarding the WMO Global Campus feasibility study;  **Recognizes** the desirability of building upon existing infrastructure such as WIS;  **Having considered** the recommendations of the EC Panel of Experts on Education and Training related to the development of a WMO Global Campus calendar capability in the short and long term (Annex 1 to this decision),  **Requests** the Commission for Basic Systems to examine:   1. utilisation of the WIS meta data profile to accommodate education and training resources and events, 2. develop an interface to be hosted by at least one GISC to display the education and training meta-data in date-order as the basis for a Global Searchable Calendar and, 3. consider the option for the EC Panel of Experts on Education and Training to provide a process for approval of contributors of education and training meta data to the WIS catalogue; |

The details on metadata are shown in Annex A and of note is that in terms of future developments to include a catalogue, the metadata for cataloguing of offerings, as well as calendaring of offerings should be consistent not require duplication of entries.

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## 5. Recommended Text

ET-WISC noted the information from the EC Panel on ETR and the proposed draft recommendations for EC-68 requesting GISC to support the discovery of training related metadata in WIS catalogue and calendar.

It noted that if EC-68 agrees, there will be a request to CBS to progress this and this will flow into the ET-WIS action in 2017.

The ET-WISC also noted that exact requirements in terms of the functionality and user interface of a calendar should be clarified prior to any WIS pilot.

**Annex A**

The **Metadata** for the WMO Global Campus offerings is shown below.

Most of this is on the existing Moodle prototype site, the items in red were suggested by the EC Panel, some of these are already on the prototype, albeit not on the initial list, the others, should be added to next stage developments

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| **METADATA REQUIREMENTS (MD) Recommended for offering to WMO Global Campus calendar.**  The following information was suggested as the MD to be entered by institutions offering onto the WMO Global Campus calendar.   1. Course Name 2. Course Description 3. Course Duration, including start and end dates 4. Course Location 5. Delivery Institution (might be different to Location) 6. Region/area of applicability 7. Course Delivery Format 8. Delivery Language 9. Fees if applicable 10. Application deadline 11. Learning Content and links to qualifications or competency frameworks 12. Expected Learning Outcomes 13. Learning activities used to achieve outcomes 14. Awards (Diplomas, Certificates) associated with the Course 15. How Learning is assessed 16. Additional Quality Management processes used by the institution 17. Intended Audience 18. Pre requisites 19. Is offering part of a larger offering 20. Contact person ( there is already a contact email part on the prototype, so this can be added too) 21. Link to the web (already added to prototype)   Ideally, the above items should be Viewable or Searchable from the calendar, i.e.   * Viewable, able to be viewed from a landing page of the calendar * Searchable, able to be searched for using key words for example, on the searchable calendar   In addition, and noting the initial thoughts on **Quality Assurance**, the following items are to be considered for recommendation as discoverable items, i.e. able to be found for example perhaps through a link to the relevant areas of an institutions web site, or to a contact person or by details entered on item 16 or 20 above.   1. How the training system is managed 2. How Learning Needs are determined 3. How materials are kept up to date and relevant 4. How trainers are hired, trained, monitored and evaluated 5. How the Facilities, resources and technology infrastructure are managed 6. How training is monitored, evaluated and improved 7. Application process including how the trainee is selected |