

BOARD OF EXAMINERS COORDINATING COMMITTEE REPORT
Canadian Council of Land Surveyors
May 2009

Introduction

There are three distinct yet related initiatives that were being undertaken through CCLS by the board of examiner representatives that made up BECC. They are:

1. **Syllabus development work under HRSDC LM funding initiative,**
2. **A share of the ongoing administration of the syllabus, and**
3. **The CCLS accreditation program.**

It is strongly suggested that one of the following two options must be acted on by the CCLS Board at the May 25/26 meeting with respect to each of these three initiatives:

Option 1: Decide to transition from CCLS (BECC) to CBEPS, define the parameters that will guide the transition, and allocate the resources to ensure the transition happens without further delay.

Option 2: Decide to keep the initiative on the CCLS agenda, define the next steps, and allocate the resources to ensure the work is done without further delay.

This report outlines each of the three initiatives and the issues that need to be considered either by the CCLS Board if they decide to do the work, or by the CCLS and CBEPS Boards if they decide to transition the work from CCLS (BECC) to CBEPS. At the end of each section, specific suggestions for decisions and next steps are made.

In order to understand the initiatives being discussed in this report, the work that is in progress, and the issues guiding that work, it is recommended that the background at the end of this report, and the four referenced documents, be read by CCLS Directors and any other individuals that will be involved in the initiatives. This includes CBEPS Directors if a transition of duties is planned. A thorough understanding is necessary so that the key aims and objectives of the syllabus and the accreditation program, and the issues that have been identified for moving forward by those who have invested significant time and effort into these programs over the years, will be maintained.

Three Initiatives

1. Syllabus Development Work under HRSDC LM Funding Initiative

CCLS has received funding from HRSDC to develop the syllabus (up to \$38,400 of the \$99,094 project budget). The following work is included:

- finalizing the syllabus item descriptions,
- updating of the text and reference lists for each item,
- drafting of learning outcomes for each item,
- writing study guides for each item,

In order to fulfill its obligations as the recipient of the funding CCLS must be part of the process. CCLS also has background that provides insight into objectives and principles that should be applied to the detailed development of the syllabus. CBEPS has the people and expertise to carry out the tasks involved.

Inherent in the work outlined above are:

- Maintaining communication with the universities and the associations,
- Developing policy around the syllabus as outlined in the document *BG 0801 Core and Options Syllabus w transition notes*.

It is suggested that a small joint task force be formed, terms of reference be written, and contracts be offered to the appropriate subject matter experts by June 5, 2009. Individuals to represent CCLS on this task force need to be named.

2. Administration of the Syllabus

Once the syllabus development is complete, administration of the syllabus remains an issue. The syllabus serves the needs of the associations which have the legislated authority to determine licensing requirements including academic requirements embodied in the syllabus. It is therefore the individual associations that 'own' the syllabus. The BECC recognized this in its make-up and mandate and the Harmonization initiative which gave rise to the new syllabus recognized this in its processes.

The maintenance and administration of the syllabus is a service to the associations. Regular reviews should continue to take place; communication with the academic institutions and associations should be maintained; process and policy links to accreditation, syllabus examinations, and recognition of equivalencies for individual courses and exemptions for CBEPS candidates should be an ongoing consideration.

Until now, BECC played a role in administering the syllabus by facilitating communication between the regional boards of examiners and initiating the last two major revisions to the syllabus including the current one. ACLS Board of Examiners also played a key role in developing the examination system and identifying special examiners who made regular recommendations for syllabus updates and improvements. The regional boards contributed to both efforts on behalf of their member associations by participating in a syllabus MOU.

CBEPS now has all associations except Quebec as members, BECC is no longer functional, and CCLS is undergoing a major transition. This is not so much a transition of responsibility for administering the syllabus as a natural consolidation of that responsibility.

It is suggested that the CCLS Board decide whether or not to accept the CBEPS offer to administer the syllabus at its May 25/26 meeting. If the decision is yes, the Board must define any parameters it deems appropriate. If the decision is no the Board must provide a rationale to the associations for an alternate plan for administering the syllabus.

3. CCLS Accreditation Program

It has been recognized for at least four or more years that the accreditation program itself should be revised and updated. This has been discussed by several bodies at many meetings including the BECC, recent evaluation teams, the Syllabus Review Task Force and the CCLS Board of Directors, but a concerted effort to revise the program has not yet been made. Completing the review and revision of the program will take considerable work and needs to be done in the very near future. The work should include consultation with the Universities that have accredited programs or have requested evaluation, specifically UNB, UofC, and BCIT.

It has been suggested at CCLS Board meetings that CBEPS take on the accreditation program and CBEPS has offered to do so. A decision is needed so that there is no further delay in getting the work done. However, this report suggests that the transition must be more than a simple handover of documents. Both parties must understand and commit to the transition process.

The following four scenarios illustrate the situations that, it can be argued, should either not have happened or should have been dealt with more effectively if the syllabus and the accreditation program work was complete. They remain situations that need to be dealt with.

1. BCIT has delayed their application for evaluation for over a year. While it has not been stated outright by BCIT, it can be reasonably assumed that the current shortfalls in the accreditation program and the state of transition of the academic syllabus on which accreditation is based, are the reasons for the delay. An underlying frustration with the amount of work needed to apply for accreditation, and more importantly, the real value of that work, has been expressed.
2. The University of New Brunswick has requested an evaluation of their new program. This is a program designed specifically to produce graduates that qualify academically for the licensing process of the associations. CCLS cannot effectively respond to their request for evaluation because of the current restrictions of the accreditation program and the state of transition of the academic syllabus on which accreditation is based.
3. The University of Calgary recently requested approval of a change to their program. It was argued by the Associate Head of the Department, Professor Mike Barry, that the change increased the surveying component of the geomatics degree program for the surveying stream students. The change was to add a course called Geodetic and Engineering Surveys 1., which focuses on survey measurement science, to the core course and make a course called Design and Implementation of GIS 2., which includes advance database design, an optional course. It was argued that a reasonable level of GIS and data base design was covered in other courses in the core program. While the BECC did not find fault with the reasoning behind the request, and recognized that it would be acceptable if the new syllabus was in place, it was not possible to grant approval because the existing syllabus and accreditation program did not allow it. This caused a level of frustration on the part of the University.

1. Course Description: Instrument systems and procedures for engineering and geodetic surveys: precise levels, high-precision theodolites, electronic distance measurement instruments, gyro-theodolites. Heighting, triangulation, instrument calibration, observation procedures and reductions, introductory deformation analysis, error analysis, survey computations, map projection computations, heighting using satellite systems.

2. Course Description: Overview of Geospatial Information System: concepts and applications. GIS architecture. Conceptual data modeling, Relational database design. Advanced database topics: database normalization, data dictionary, query languages, object oriented databases. Geovisualization: definition and purpose, human-computer interaction, visualization techniques Data quality standards, error and uncertainty. System design and implementation.

4. The University of Calgary has also recently requested instructions for submitting samples of student material for the next evaluation which will take place in spring 2010 so that they are aware of the requirements before the survey camp in August 2009. This request, and several conversations with Dr. Barry and others in the department, shows an underlying frustration with the amount of work needed to apply for accreditation, and more importantly, the real value of that work.

The following basic principles that need to be considered in reviewing the accreditation program have been identified. They are outlined in more detail in the documents referenced in the background section of this report.

- Deciding on the appropriate body to run the program (ex. CCLS, CBEPS).
- Creating better documentation of processes for consistency and comfort level of volunteers who are asked to be part of evaluation teams.
- Building more flexibility into the program to deal with the wider range of situations and encourage more participation in the program (ex. BCIT, Ryerson, Laval, new UNB program).
- Reviewing the level of the documentation and reporting required in the evaluation of to ensure that the process is thorough but not unduly onerous for institutions or evaluation team volunteers.
- Considering the value of existing accreditations (surveying or others such as engineering) and giving credit for those accreditations in the evaluation process.

It is suggested that CCLS decides, at the May 25/26 meeting, whether to continue to run the CCLS accreditation program for candidates to the associations.

If the Board decides that CCLS will continue the program, the Board must allocate resources to review and revise the accreditation program to reflect the intent of the existing policies and processes, to accommodate changes in education since the program was designed, to reflect previous experience of BECC, to streamline the process, and document the processes and policies more clearly.

If the Board decides that CCLS will not continue the program, the Board should consider implementing an MOU with CBEPS to form a joint CCLS/CBEPS task force to review and revise the accreditation program as described above, and appoint CCLS members to that task force.

In either case, the review and revision of the accreditation program should be an immediate priority and targeted for completion by September 2009.

Background

As noted in the introduction to this report:

“In order to understand the initiatives being discussed in this report, the work that is in progress, and the issues guiding that work, it is recommended that the background at the end of this report, and the four referenced documents, be read by CCLS Directors and any other individuals that will be involved in the initiatives. This includes CBEPS Directors if a transition of duties is planned. A thorough understanding is necessary so that the key aims and objectives of the syllabus and the accreditation program, and the issues that have been identified for moving forward by those who have invested significant time and effort into these programs over the years, will be maintained.”

The following four documents have been used to inform the CCLS Board of Directors and others involved in accreditation and syllabus work over the past two years. Each has been annotated to indicate items that are of particular interest in the transition of responsibility from CCLS (BECC) to CBEPS.

Backgrounder: **BG 0801 Core and Options Syllabus 2 w transition notes.doc**
Dated January 9, 2008
For: CCLS Directors’ Meeting January, 2008
BECC Members
APBELS, CBEPS, AERC, OAGQ-BE Members
Association Councils
Proposed Core & Option Joint Board’s Syllabus

Sections of this document have been highlighted with comments to indicate items that should be considered in the development of the syllabus. These include:

- What has been done to date in developing the syllabus and related documents, including work that has not been fully recognized,
- Principles that informed the previous work and should be understood by those developing and administering the syllabus, and
- Work that has been identified as next steps including work that is to be done under the HRSDC funded project.

Terms of Reference for **ToR for BECC 0605 w transition notes.doc**
Board of Examiners Coordinating Committee
Adopted at June 28, 2006 Board of Directors Meeting

Sections of this document have been highlighted with comments to indicate concepts that should be perpetuated through the dissolution of BECC and the transition of its responsibilities to other bodies. These include:

- The specific aims and objectives of BECC,
- Links between CBEPS and OAGQ, CCLS/PSC and the accredited institutions,
- Confidentiality and conflict of interest considerations,

Memorandum of Understanding Between **CBEPS-CCLS MOU 08-12-22 w transition notes.doc**
The Canadian Board of Examiners for Professional Surveyors (CBEPS)
and the Canadian Council of Land Surveyors (CCLS).

A draft MOU between CBEPS and CCLS has been written which transitions the syllabus development work under the HRSDC LM Funding Initiative and the CCLS Accreditation Program to CBEPS. Comments, insertions, and deletions have been used to annotate areas that need consideration and reflect a next draft of the MOU. These include:

- Specifying that the accreditation program referenced in the MOU is for recognition of candidates to the licensing bodies only. With the broader membership proposed for Professional Surveyors Canada, a distinct accreditation program for that membership is under consideration and may not involve CBEPS.
- Specifying that CBEPS and CCLS commit to following up on the recommendations for improvements to the accreditation program that have been made by the BECC and syllabus review task force. A joint task force for the transition will ensure that the process is more than just a transfer of documents.
- Because CCLS is responsible for the HRSDC funding, managing the finalization of the syllabus item descriptions, updating of the text and reference lists, and the drafting of the learning outcomes and study guides must be handled through a joint task force of CCLS and CBEPS. A more detailed document (i.e. terms of reference) is recommended for this joint task force.

Accreditation Program
Canadian Council of Land Surveyors

Acrcd Policy w transition notes.doc

It has been recognized for at least 4 years that the accreditation program itself should be revised and updated. This has been discussed by several bodies at many meetings including the BECC, recent evaluation teams, the Syllabus Review Task Force and the CCLS Board of Directors but a concerted effort to revise the program has not yet been made. Comments, insertions, deletions, and highlighting have been used to annotate areas that need consideration and reflect changes that have already been recommended by various groups and individuals. Completing the review and revision of the program will take considerable effort, needs to be done in the very near future, and should include consultation with the Universities that have accredited programs or have requested evaluation, specifically UNB, UofC, and BCIT.