

## Modeling and Simulation Professional Certification Commission Timelines, Roles and Responsibilities

### Review Process Overview:

Upon completion of an application, two credential reviewers are assigned. Each credential reviewer assesses the education (ED), work experience (WE) and letters of recommendation (LR) for the applicant, assigning a score (ranging from 0 to 100) for each of the three components. The three component scores are used to calculate the credential review grade (CD), per reviewer, using the following formula:

$CD = p1 * ED + p2 * WE + p3 * LR$ , where  $p1$ ,  $p2$  and  $p3$  are parameters, and  $p1 + p2 + p3 = 1$ .  
Recommended parameter values are  $p1 = 0.25$ ,  $p2 = 0.6$ , and  $p3 = 0.15$ .

If both of the two reviewers return a credential grade (CD) that meets or exceeds the necessary threshold ( $CD \geq 74$ ), then the Credentials Review is passed. If both of these reviewers' grades fail to meet the threshold ( $CD < 74$ ), the Credentials Review is failed. The applicant is informed that the credentials provided are insufficient for certification and some additional information is provided to indicate the areas that are weak (see Potential Reviewer Messages section below). If one passing grade and one failing grade are returned, a third reviewer is assigned to break the tie. The final determination is based on the best two out of three reviews.

If the Credential Review is passed, then two exam reviewers are assigned. Once two exam grades (EX) are returned, the applicant's composite grade is calculated based on the following formula:

$G = p4 * (0.5(CD1 + CD2)) + p5 * (0.5(EX1 + EX2))$ , where  $p4$  and  $p5$  are parameters and  $p4 + p5 = 1$ .  
Recommended parameter values are  $p4 = 0.3$  and  $p5 = 0.7$ .

If the composite grade (G) meets or exceeds the necessary threshold ( $G \geq 74$ ), then the certification is approved. Validation of the approval may be required (see Certification Board section below).

### Reviewers:

***There are two types of reviews that will take place as an application is considered. The first is a review of the applicant's credentials. Credential Reviewers are individual members of the Certification Board. The second review is a review of the exam submitted by the applicant. Exam Reviewers are individual members of the Exam Subcommittee.***

Upon notification that a reviewer has been assigned to an application, whether to review the applicant's credentials or an exam, the reviewer should immediately ascertain whether there is sufficient time, given current workload and other pending reviews to complete the review. Credential Reviews should take an average of **1 hour** to complete; Exam Reviews should average **2 hours** to complete. If not, the reviewer should log on to the M&SPCC web site and request that the review be reassigned. Reassignment should only be made when absolutely necessary, but will help to avoid overdue reviews during vacations, extremely heavy work periods or medical emergencies.

Reviewers have two weeks to complete a review. The M&SPCC system will attempt to balance the workload across reviewers. The M&SPCC on-line system will automatically remind a reviewer of upcoming due dates for reviews via e-mail. If a due date is not met, the M&SPCC on-line system will mark the review as overdue and subsequently reassign the review to another reviewer. This reassignment occurs in an attempt to meet the overall deadline for the application process and should be avoided. Reassigned reviews will be earmarked as such and should be given higher priority by reviewers.

To submit a review, the reviewer must log in to the M&SPCC web site. For Credential Reviews, the reviewer must submit the name of the applicant, the grades for each component: education, work experience and letters of recommendation. The Credentials Scorecard may be downloaded for use in grading an applicant's credentials in an objective and consistent manner. For Exam Reviewers, the Exam Answer Sheets will also be available for download. The Answer Sheets will provide a non-inclusive list of

accepted answers for the exams. However, some questions will be subjective and the reviewer will have to rely on personal knowledge and experience as well as available references (i.e., texts, other professionals).

Reviewers are strongly encouraged to communicate with other reviewers to discuss issues with applications or exams currently under review. An e-mail reflector, chat room or similar environment will be established to support these discussions. Some issues may result in recommendations for modifications to the certification process. These modifications should be presented to the Implementation Group or the Oversight Council, as appropriate, for approval.

Prior to any application being approved or denied for certification, a reviewer is expected to validate the certification result. This validation is primarily for periods following the initial on-line debut and subsequent system updates to insure proper processing of applications. Reports may be generated to summarize the relevant information in support of this validation step.

### **Timeline**

An applicant initiates application and makes a credit card payment to cover the application fee and the exam fee. All application items must be complete within 45 days of the date the application is initiated; a reminder of the deadline will be sent via e-mail if the application is not complete within 30 days. If the application is completed within the 45 days, the Credential Review is initiated. If the application is not complete, the exam fee will be refunded.

Each credential reviewer is given two weeks to review all the application materials. If a reviewer is reassigned due to an overdue review, and if a third review is needed and it is also reassigned when overdue, the Credential Review could take two months.

Once the Credential Review is completed, the applicant is notified that they have passed the Credential Review Phase and may now complete the exam. The applicant must access the exam within 30 days of its availability and must complete it within 30 days of initial access. If the applicant's credentials are insufficient for continued consideration, the applicant will be notified of which component is weak via a predefined message selected by the credential reviewers.

Once the exam is completed, Exam Review is initiated. Each exam reviewer is given two weeks to review the exam. If a reviewer is reassigned due to an overdue review, the Exam Review could take a month.

Once the Exam Review is completed, the applicant's summary data is submitted to the Certification Board for validation. Only one Certification Board member is needed for validation, but a member must validate the certification status of the applicant within two weeks. Once validation occurs, the applicant is notified that the certification process is complete and whether certification has been approved or denied.

Using the information above, the maximum amount of time to complete the certification process should not exceed seven months and could realistically take under 3.5 months.

### **Applicants**

Any applicant must be prepared to provide basic personal and career information along with a credit card payment for the application and exam fees at the time an application is initiated via the M&SPCC web site. Once the application is initiated, the applicant must submit a resume describing his/her professional simulation experience in detail, three letters of recommendation, and a signature page within 45 days.

Originals of the letters of recommendation must be sent to NTSA, Attention: M&SPCC - LR. Fax copies can be sent in addition to mailing originals to hold the place of the original so that deadlines are not exceeded. An original of the signature page must be sent to NTSA, Attention: M&SPCC - SP. As with the letters of recommendation, a fax copy may be used as a placeholder. Placeholders will be tagged and a passing review should not be submitted until originals are received. If the review deadline will be exceeded due to the absence of an original, the credential reviewer should deny the application and select a message indicating the absence of original documentation.

Within two months of submitting the completed application, the applicant will be informed whether the credentials provided are considered sufficient for proceeding to the exam phase. Once notified the credentials are sufficient, the applicant has 30 days to access the exam and an additional 30 days in which to complete the exam. If the applicant's credentials are deemed insufficient, certification is denied and some feedback is provided.

Within 1.5 months of completing the exam, the applicant will be informed whether certification as a simulation professional has been approved or denied. If the certification is approved, it is valid for a period of four years. If certification is denied, the applicant cannot reapply for certification for at least six months from the date of denial. However, the applicant, having passed the Credentials Review, may request an exam-only application within one year of the date of denial. If the applicant is confident that an error occurred during the evaluation process, the applicant must provide evidence of the error to the Certification Board, c/o NTSA. The applicant must believe the error would be sufficient to impact the outcome of the certification review.

### **Certification Board**

The Certification Board oversees the certification process. Reports may be generated to monitor the number of applications in progress and the number of reviewers with items pending review as well as the status of other steps in the process. The Certification Board is expected to provide final approval or denial of all applications, merely as a sanity check to the automated process, for a period of at least one month following any change to the MSPCC on-line system. If no major problems are found during this period, the Certification Board may alter the process to sample accepted certifications for validation, but all denied certifications will continue to require validation.

Any applicant who believes an error has occurred with the evaluation must appeal to the Certification Board, c/o NTSA, with evidence of why the applicant believes the error occurred. The Certification Board will review the evidence along with the certification data and, within one month, return a decision on whether the certification decision has been changed. All decisions made by the Certification Board are final.

### **Potential Reviewer Messages: (multiple selections accepted)**

- Absence of original documentation
- Minimum degree requirements not achieved
- Insufficient work experience (overall)
- Insufficient work experience within simulation field
- Inadequate letters of recommendation
- Inadequate resume of simulation experience
- Direct simulation experience unsupported
- Insufficient combination of degree & years of experience
- Absence of participation in professional organizations