CyBOK

Review and update process of Knowledge Areas (KAs) including the consideration and addition of new KAs.

Introduction

This document defines the processes to be followed by the CyBOK project in all aspects of the maintenance and update of the Cyber Security Body of Knowledge, KAs and other supporting documents until March 2021. This specifically includes minor and major revisions to current KAs and the addition of new KAs. The process will also cover version control management.

1. Sources of change

It is anticipated that there will be three main sources of change:

The original author: authors of existing KAs may wish to have the opportunity to update their original KAs with updated information.

Internal: project team, editor or Steering Committee.

Community comments: including the Phase II backlog.

Formal, written change requests will be submitted in each case. The change request should contain further detail and the rationale for the change to be considered.

2. Change triage

The Executive Board (comprising all 5 investigators) will triage all comments received regarding the update of existing KAs and addition of new KAs. These changes will be reviewed informally via email exchange and will be a standing agenda item on the fortnightly Executive Board progress meetings. The potential outcomes from the triage process are:

No change.

Scope refinement of change: the scale of change is not clear and further detail is needed to be scoped before a decision can be made. Once formally scoped by one member of the Executive Board, it will be reviewed again by the Executive Board. For any potentially major change it will be necessary to consider the impact on the content of other KAs as well as any proposed specific additions or modifications.

Deferral to post Phase III: insufficient resources available in Phase II to action change or the change falls out of scope of the current phase.

Editorial change: a small correction, such as reference, spelling or minor factual error which does not required the attention of an expert author.

Minor change: the addition or correction of small amounts of material within the existing document structure e.g., to add a paragraph within a topic to expand what may have been previously mentioned briefly.

Major change: any change that modifies the topic structure of the document, up to the addition of a new KA. Although in principle the addition of a KA may involve the restructuring of several other KAs, in

practice such major changes will be avoided if possible, both out of consideration to CyBOK users and to the scope of the current phase.

The Steering Committee will be provided with a brief summary of the change requests and triage to allow comment on the operation of the process (as distinct from any specific change proposal).

As part of the triage process the Executive Board can exceptionally determine that a change request is urgent and should be actioned immediately and the updated document should be published the next day.

3. Outcomes from change requests

The two outcomes from change requests are a *KA revision* or the addition of a *new KA*.

Editorial change

As these are small corrections only, not requiring the attention of expert authors, the change(s) will be implemented directly by the KA editors as a *KA revision*.

Minor change

The addition or correction of small amounts of material maintaining the current document structure will be implemented by the editor and author depending on the scope of the change and resources available. Minor changes will be implemented as a *KA revision*.

Major change

Community feedback will be invited for all proposed changes that modify the topic structure of a KA document or that of CyBOK. The input received from the community feedback phase will be reported to and considered by the Steering Committee.

Recommendations from the Steering Committee along with the community feedback will be fed back to the Executive Board. The Executive Board can then request that the refinement of change needs further scoping and should be passed through the review process again. Alternatively the Executive Board will determine that the change can be made and should be implemented by the editor and author resulting in a significant *KA revision* or the addition of a *new KA*.

4. Community Feedback

All major change requests will be publicised to elicit community feedback and input. Change requests will be further populated to become a formal, written requirements document, clearly detailing the proposed change and scope by the corresponding editor. The community feedback phase will be timed alongside the Phase III community workshops to ensure maximum input. The community workshops will run at approximately 6-month intervals. The formal change request will also be published on the CyBOK website and circulated to the CyBOK contact list to ensure maximum exposure.

Community feedback and comments will be directed to contact@cybok.org where all comments will be logged. Comments will be reported to the Steering Committee for full consideration and discussion and the Executive Board advised accordingly.

5. KA revision

Minor and major changes leading to a KA revision will be reviewed by the Executive Board to determine if the change should be implemented by the editor or by an expert author. For the latter, the Executive Board will consider if the original author should be approached to implement the change or if a new co-author should be sought.

The Executive Board will also determine if the KA revision warrants a technical review. Potential new authors and reviewers will be discussed and agreed by the Executive Board.

6. New KA

Major changes leading to a new KA will require the appointment of an editor and go through the same development process as in Phase II. This will incorporate the selection and recruitment of an author and peer review panel and a public consultation phase.

7. Version control management

Individual KAs and the whole CyBOK will have a 3-element version number (e.g. x.y.z):

1st element: the KA structure (increment on a new KA or a completely rewritten KA)

2nd element: the topic structure (increment if topics are added or removed from within KAs)

3rd element: detail (increment on any change within KA topics)

KA revisions and new KAs will usually be planned to be batched and released every 3 months.

These updates will also result in an update to the whole CyBOK including an update to the corresponding element of the CyBOK version. If there are editorial or minor changes to a KA then for CyBOK x.y.z only z changes. If a major change to a KA is made or a new KA added then y changes. Only if the whole CyBOK structure changes will x change.