



Science and Technology Organization  
Collaboration Support Office

Neuilly-sur-Seine | France



# NATO STO Review Journal and Peer Review Process

# The NATO STO Review

## Definitions

### 1. Definition of the Journal

As NATO's leading organization for Science and Technology (S&T), the STO delivers innovation, advice and scientific solutions to meet the Alliance's ever-changing needs through the work of the collaborative expert panels and the in-house executive body that are composed of leading scientists and experts from NATO and Partner nations. National representatives collaborate towards reaching the forefront of S&T through collaborative working program.

The NATO STO Review Journal is a peer-reviewed open access journal devoted to the advancement of Science and Technology for the Alliance's defence and security purposes through the dissemination of original full scientific research papers covering new theoretical developments and/or experimental results related to NATO S&T Activities.

NATO S&T activities embrace scientific research, technology development, transition, application and field-testing, experimentation including systems engineering, operational research and analysis, synthesis, integration and validation of knowledge derived through the scientific method.

### 2. Definition of Peer Review

Peer review is the process of subjecting an author's research to the review of others who are experts in the same field, traditionally but not necessarily, prior to presenting their work at a conference and/or publication in a journal. The main role of the peer review process is to reinforce the credibility of research by facilitating its evaluation and to improve the overall quality of published papers.

The principal types of peer reviews are single blind, and double blind. In a single blind peer review, the reviewers' identity is kept anonymous from the authors. However, the reviewers can see the author details. In a double blind peer-review, the identity of both the author and reviewer is kept hidden.

The STO Journal peer review process follows the single blind peer review.

### 3. Purpose of the peer reviewed STO Journal

The general purpose of this scientific review is to help to highlight and to promote the undoubtedly outstanding scientific achievements carried out under the Collaborative Programme of Work, to guarantee scientific excellence by meeting academic standards of selected events allowing authors to be recognized amongst their peers.

## Background

Starting within Panels and Group Chairs (L2CC) in 2018 the STO discussed the possibility of establishing an STO peer reviewed journal to provide an opportunity to the STO Community to publish open access scientific papers generated from the programme of work. The discussion was triggered by the recognition that the STO scientific network was aging and there is a need to attract young scientists and engineers to Level 3 activities. Aside the young scientist events and young scientist Panels and Group awards, an STO Scientific Journal was put forward as an outlet that could provide an opportunity for the community at large, but in particular our younger scientists.

Young scientists are always looking for the recognition of their scientific work and publishing articles in well-known journals with impact factor (citation index) as the major driver. It was understood that although there are many publishing opportunities for young scientists it is not easy to reach journals with impact factors and it is also extremely costly. Providing such an opportunity within the STO would increase the attractiveness of the CPoW for young scientists and help to increase their exposure within the scientific community at large. Currently the CSO publishes only reports and proceedings from conference type events, which are not recognized by the wider scientific community as they are not openly accessible, nor are they peer reviewed. This has understandably resulted in a number of our community publishing papers from STO proceedings outside the STO, for example with the IEEE.

To address this issue, in 2019 the AVT Panel, under the leadership of Prof. David Lecompte, took an initiative and requested the establishment of an AVT Peer Reviewed Journal. This was agreed within AVT and led to two publications in 2020, the first an overarching concept document and the second a journal containing a number of papers from their Specialists' Meeting on 'Graphene Technologies and Applications for Defence'. These papers underwent a thorough peer review process prior to being published in PDF format. The papers are available from the STO Website (<https://www.sto.nato.int>).

Following on from the work of the AVT Panel, the concept of a Peer Review Journal was further discussed within the L2CC resulting in a proposal to establish an electronic, Web based journal under the auspices of the STO. The concept was presented to the L2CC in November 2020, and to the two remaining STO Executive bodies, OCS and CMRE. All three directors, CS, DCMRE and DCSO endorsed the proposal with additional administrative changes. The proposal is now presented to the SSG/STB for endorsement and approval to establish the journal with the name "NATO STO Scientific Review.

# The Peer Review Process

## Roles and Responsibilities

### 1. Editorial Board

The STO Editorial Board is a committee appointed by the NATO Chief Scientist, with the responsibility to manage the editorial direction of the STO Scientific Review Journal, the overall technical and intellectual content of the Journal and for maintaining the professional integrity of the review process.

The Editorial Board is also responsible for providing policy and scope and ensuring the openness of the Journal's scientific scope and strengthening its ability to encompass all the theoretical sensitivities reflected in the STO Programme of Work.

It provides advice regarding new topics, special editions and advising on the direction of the journal, providing feedback on past issues and making suggestions for both subject matter and potential authors as well as endorse the journal to authors and readers.

The Editorial Board delegates to Associate Editors the responsibility of obtaining timely reviews from qualified peer scientists, working with papers to make needed revisions, and making the decision whether to accept or reject the paper.

The Editorial Board is chaired by the Editor in Chief and shall be made up of the following:

- Editor in Chief (Chair) - CSO Director
- Members - Panel/Group Chairs, CMRE Chief Scientist, OCS Scientific Advisor

### 2. Panels/Group/CMRE

The Panels, Group and CMRE are requested:

- To identify eligible STO event activities for peer review,
- To submit their proposed activities to the Editorial Board, through the IKM Office.

### **3. Programme Committee**

The Programme Committee of the individual Event Activity is responsible for the overall organisation of an Event Activity including all tasks according to the standard requirements.

In a peer reviewed Event Activity, the Programme Committee is requested:

- To make the selection of manuscripts for the event,
- To identify and appoint an Associate Editor,
- To identify and confirm a sufficient number of peers for the peer review process (minimum two reviewers per paper),
- To guarantee the high scientific standard by the review and initial down-selection of eligible manuscripts to be peer reviewed,
- To send the confirmed list of manuscripts, including contact details of the reviewers to the IKM Office, and
- To include the peer review announcement in the Call for Papers.

### **4. Associate Editor of a selected activity**

The Associated Editor shall normally be a member of the Programme Committee of the selected Event Activity.

The Associate Editor is requested:

- To initially check the manuscripts selected for peer review,
- To anonymously assign the manuscripts to the reviewers,
- To send the package of manuscripts and reviewers to the IKM Office who would subsequently pass them to the reviewers (see point 5),
- To receive the peer-reviewed manuscripts from the IKM Office,
- To decide on the review of the peers whether the manuscript is to 'reject', 'accept with adjustments' or 'accept without adjustments';
- To initiate a second review based for 'accept with adjustments' manuscripts by asking the authors to make the changes according to the feedback received;
- To submit the accepted manuscripts to the IKM Office.

### **5. CSO Information and Knowledge Management (IKM) Office**

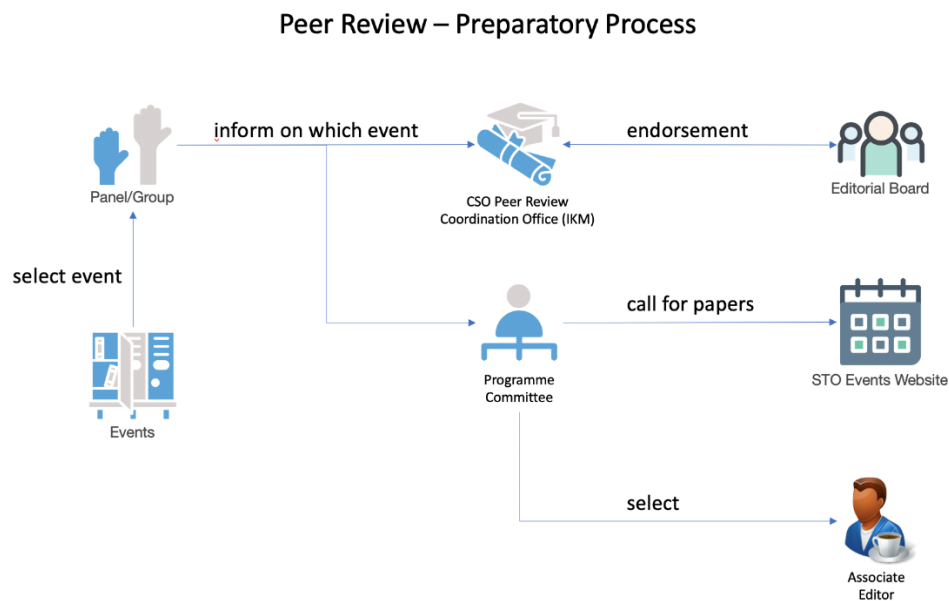
The IKM Office is in control of the entire process and development of appropriate instructions/ documents for the Programme Committee and the Scientific Committee while closely cooperating with the CSO Publications Office. It support all stakeholders of the peer-reviewed (and non-peer reviewed) process in any administrative or organisational aspects.

These tasks comprise but are not limited:

- To coordinate the manuscripts and reviewers for the peer review process with the Associated Editor and the Programme Committee,
- To receive the package of assigned peers and manuscripts from the Associated Editor,
- To send manuscripts with instructions and forms to reviewers,
- To receive evaluated manuscripts including comments from reviewers,
- To send the manuscripts with suggestions and comments through the CSO Coordination Office to the Associate Editor,
- To repeat the process for manuscripts 'accept with adjustments',
- To receive and distribute the reviewed manuscripts including comments,
- To collect and to archive documentation including manuscripts and comments for the entire peer review process of the Event Activity,
- To activate the subscription in the "Web of Science" Citation Index and seek for further listings in Citation Indexes,
- To assign DOI numbers to the peer review manuscripts and list them in selected citation indexes,
- To ensure they are indexed in a number of the leading databases (i.e. Elsevier Scopus, Thomson Reuters Web of Science) making them easily discoverable, readable and citable,
- To publish The Journal on the NATO STO Review website.

## The Process

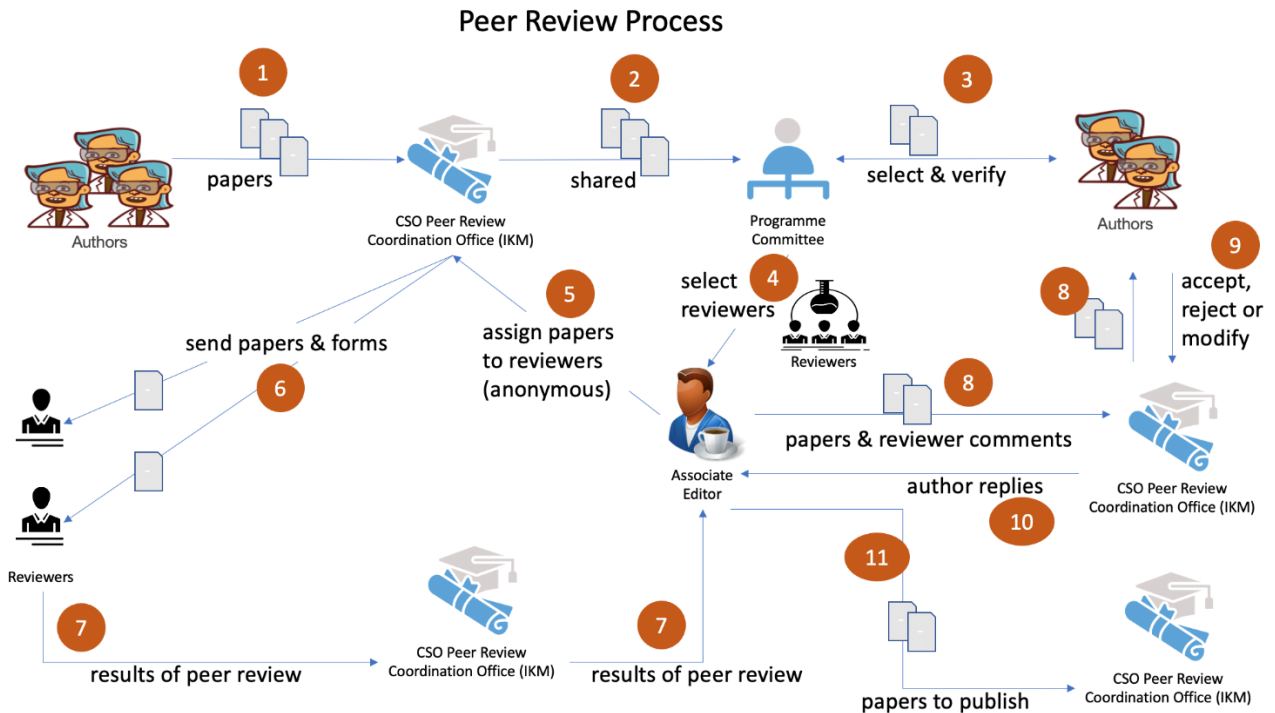
### Preparatory Process



After all the Activities for the year are approved:

- The Panel/Group selects an event suitable for peer review and informs the respective Programme Committee (note: in the AVT Panel, this is done by the AVT Scientific Committee) and the CSO Peer Review Coordination Office (IKM) through the Panel/Group Office.
- The CSO Peer Review Coordination Office (IKM) informs and liaises with the STO Editorial Board for endorsement,
- The Programme Committee includes the notification about peer review in the Call for Papers to inform authors that their manuscripts could be selected for peer review and published in the STO Journal,
- The Panel/Group Office distributes the Call for Papers via the STO Events website,
- The Programme Committee identifies and appoints an Associate Editor for the peer review issue from among its members.

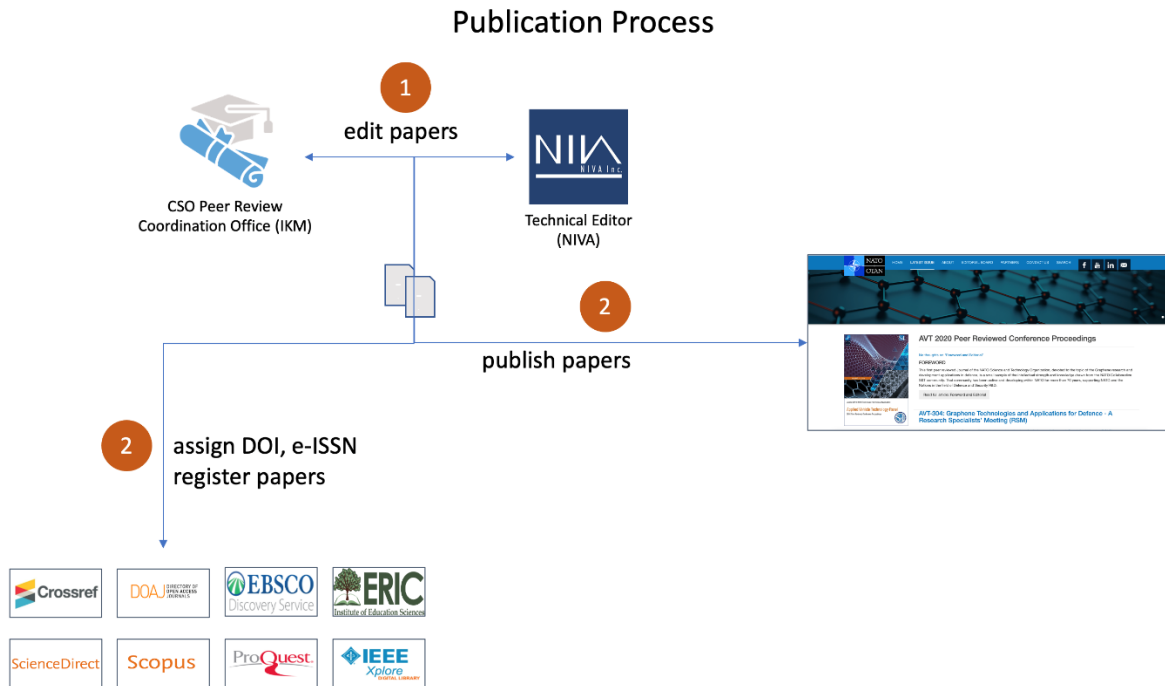
## Peer Review Process



1. The Programme Committee nominates papers suitable for peer review and confirms with authors their willingness to be peer reviewed.
2. The Programme Committee identifies the reviewers (normally two per paper) and confirms their willingness. Once confirmed, names are passed to the Associated Editor.
3. The Associate Editor anonymously assigns the reviewers to the papers and forwards the package to the CSO Peer Review Coordination Office (IKM).
4. The CSO Peer Review Coordination Office (IKM) sends the selected papers to the designated reviewers along with forms and instructions.
5. After completing the review, the Reviewers send the results to the to the Associate Editor (through the CSO Peer Review Coordination Office).
6. The Associate Editor reviews the comments made by peers and sends the papers (through the CSO Coordination Office) to the authors for modification.
7. Authors accept or reject the comments and make any necessary amendments and return the papers to the Associate Editor (through the CSO Peer Review Coordination Office).
8. After having received the papers back, the Associate Editor accepts papers without changes, accepts them after amendments have been included or rejects papers.
9. The Associate Editor then makes the final decision on which papers to publish and informs the CSO Peer Review Coordination Office.



## Publication Process - Peer Reviewed Papers



- With the assistance of the Technical Editor,
- All peer reviewed papers are published in the STO Journal (a list of rejected papers (or at least the number of papers rejected) is also published in the STO Journal).
- DOI, e-ISSN assigned and papers registered

## Publication Process - Non Peer Reviewed Papers

- All papers for the event are published according to the regular publishing procedure on the STO Website including accepted peer-reviewed papers (suitably identified as having been peer reviewed).