

## TOAR-II Working Group Guidelines

Authored by the TOAR-II Steering Committee, July 31, 2020

Updated, December 8, 2020, regarding COPDESS statement

**Summary:** The second phase of IGAC's Tropospheric Ozone Assessment Report (TOAR-II) was initiated on February 1, 2020 (<https://igacproject.org/activities/TOAR/TOAR-II>). The scope of the Activity and its publication procedures are defined in the *TOAR-II Scope* document on the [TOAR-II website](#). The TOAR-II assessment will be based on the results from Focus Working Groups and other contributions to an open Community Special Issue. TOAR-II working groups (WGs) shall be established by the scientific community and they will form the backbone of TOAR-II data analyses and synthesis of scientific discoveries. This document describes the operating principles, life cycle, and governance of TOAR-II WGs. Procedures for establishing new TOAR-II WGs can be found in the *Application Procedures for TOAR-II Working Groups* document on the [TOAR-II website](#).

**Definition:** TOAR-II Working Groups (WGs) consist of at least six scientists from a minimum of three countries and their primary goal is to synthesize, conduct and/or support the science that will be in the TOAR-II assessment.

**WG life cycle:** TOAR-II WGs are established through a proposal from a team of scientists who wish to work together on a specific aspect related to the TOAR-II assessment report. This can be a specific science question or synthesis effort, a comparative analysis of data, the development of new (statistical) methods, etc. For details on the application procedure, see the *Application Procedures for TOAR-II Working Groups* document on the [TOAR-II website](#). WG proposals will be reviewed and approved by the TOAR-II Steering Committee (SC) provided they are within the scope of the assessment and meet the criteria outlined in the *TOAR-II Scope* document (available on the [TOAR-II website](#)). Approved WGs will be listed on the TOAR-II website including the contact details of the WG co-leads. All WGs start out as Focus WGs, since WGs are expected to focus on specific topics. The outcome of a WG will generally consist of one or more contributed papers to the TOAR-II Community Special Issue. However, it is also possible that WGs specializing in data access or data analysis produce, for example, datasets for inclusion in the TOAR-II data infrastructure or software code (e.g. to perform a new type of statistical analysis).

As TOAR-II evolves, the TOAR-II SC may issue an invitation to individual WGs to prepare specific parts of the assessment, i.e. one of the core assessment papers. This may involve a re-organisation of the WG in close coordination with the TOAR-II SC. After this transition, the Focus WG will be called an Assessment WG. It is also possible that WGs can be merged or re-focused during this procedure. The lifetime of a TOAR-II WG ends either when the originally specified objectives have been met, or ultimately with the termination of the TOAR-II activity in 2024.

### WG operating guidelines and governance principles

- 1) The primary goal of a WG is to synthesize, conduct and/or support the science that will be in the TOAR-II assessment and publish these results. The WGs provide the environment for the development of the TOAR-II publications that will be the content of the assessment report.

- Focus WGs will generate results that help the preparation of the TOAR-II assessment and also publish these results in the Community Special Issue and/or as datasets or code for use in the TOAR data infrastructure.
  - Assessment WGs will synthesize and evaluate the state of science related to tropospheric ozone and produce the individual core assessment papers that comprise the TOAR-II assessment. Each invited TOAR-II core assessment paper must originate from an Assessment WG. It is possible for an Assessment WG to continue focused studies and prepare papers for the Community Special Issue while beginning to work on the assessment papers.
- 2) TOAR-II WGs should fit the scope of TOAR-II (see the *TOAR-II Scope* document on the [TOAR-II website](#)) and must be approved by the TOAR-II SC (see the *Application Procedures for TOAR-II Working Groups* document on the [TOAR-II website](#)). The TOAR-II SC will encourage ideas and research through open discussion with the WGs.
  - 3) WGs will be openly announced and solicit participation from the TOAR community. WGs shall seek consensus on all matters in a community spirit.
  - 4) WGs last for the duration of TOAR-II and they will terminate at the end of TOAR-II, unless the WG reaches consensus that its activities end earlier (i.e. the WG's objectives have been reached or they are impossible to reach).
  - 5) WGs will review their scope and objectives at least annually in coordination with the SC. To facilitate the coordination, each WG has a member from the TOAR-II SC (referred to as the SC liaison), who will keep the SC informed of WG progress. The annual review is especially relevant if the WG objectives shall be expanded and new WG members with new foci shall be added, as the SC must seek to maintain the most efficient structure and distribution of work across the entire TOAR-II activity.
  - 6) TOAR-II WGs consist of at least six scientists from a minimum of three countries. Depending on the topic of the WG the TOAR-II SC may also advise a larger minimum group size to encourage a broad community perspective.
  - 7) A TOAR-II WG shall be led by one to three co-leads. WGs appoint their co-leads and agree on the duration of their tenure or potential rotation principles. In the case of Assessment WGs, the WGs should be led by the identified lead authors of the assessment papers.
  - 8) WGs may convene their own workshops/meetings and define their collaboration protocols and platforms.
  - 9) TOAR is committed to open data practices and all WGs will follow COPDESS (Coalition on Publishing Data in the Earth and Space Sciences) principles: <http://www.copdess.org/statement-of-commitment/>

## **Funding**

TOAR-II WGs provide voluntary in-kind contributions to the TOAR-II assessment. There is no funding available to compensate for any work conducted by WG members, nor can TOAR-II finance publication fees or travel expenses. If the TOAR-II SC manages to secure funding in support of TOAR-II, this will first be directed towards covering publication fees of the core assessment papers and to support larger TOAR-II meetings and workshops. The TOAR-II SC will however support initiatives of the WGs to leverage funding, for example by providing recommendation letters if the requests are reasonable.