Prior assessment of a proposed Antarctic Specially Protected Area at Otto-von-Gruber-Gebirge (Dronning Maud Land, East Antarctica)

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(Dronning Maud Land, East Antarctica)**

**Working Paper submitted by Germany and the United States of America**

***Summary***

A prior assessment for a proposed Antarctic Specially Protected Area (ASPA) Otto-von-Gruber-Gebirge (Dronning Maud Land, East Antarctica) has been carried out by Germany and the United States of America. The proponents recommend that the CEP: (1) agrees that the values within the proposed ASPA merit special protection, (2) endorses the development of a Management Plan for the area, and (3) encourages interested Parties to work with Germany and the United States of America informally during the intersessional period in the development of a Management Plan for submission to CEP XXV.

***Introduction***

In accordance with the provisions in Annex V to the Protocol on Environmental Protection to the Antarctic Treaty (the Protocol), Germany and the United States of America would like to propose the establishment of an Antarctic Specially Protected Area (ASPA) Otto-von-Gruber-Gebirge (Dronning Maud Land, East Antarctica).

The proposed ASPA would be a multi-site ASPA intended primarily to protect a range of values.

*Environmental values:*

* large and deep ice-covered freshwater lakes (Untersee, Obersee) with extremophile microbial ecosystems (including the only known large, conical stromatolites in Antarctica);
* large breeding colony of snow petrel (*Pagodroma nivea*);
* isolated polar desert oasis ecosystem with sparse vegetation.

*Scientific values:*

* ecology: lakes as habitat for microbial extremophiles;
* ecology: uncommon lake chemistry with one of the highest dissolved methane concentrations in a natural aquatic ecosystem;
* ecology: dynamics of the population of one of the largest known snow petrel colonies and the significance of such habitat for the global population of this species;
* exobiology: ecosystems of the perennially ice-covered lakes represent analogues to study conditions for possible extra-terrestrial life;
* geomorphology/paleoclimatology: mountain landscape with a high variety of glacial, periglacial and high alpine processes, landforms and sediments;
* paleoclimatology: large subfossil stomach oil deposits (‘mumiyo’) of snow petrels as a valuable paleoclimatological archive
* geology: rocks among the youngest known massif-type anorthosite formations world-wide.

*Historic values:*

* plaque placed for commemorating the first visit by the Soviet Antarctic Expedition in 1969.

*Aesthetic values:*

* spectacular mountain peaks protruding from the inland ice sheet.

*Wilderness values:*

* low human footprint.

*Ongoing scientific research:*

* limnology, aquatic ecology, microbial ecology, geochemistry, periglacial geomorphology, exobiology.

***Prior assessment***

Following discussions at CEP XX (2017), the *Guidelines: A prior assessment process for the designation of ASPAs and ASMAs* were up dated to include a non-mandatory ASPA prior assessment template to facilitate the provision of information consistent with the Guidelines (ACEP XX report, Appendix A). Germany and the United States of America have completed the prior assessment template for the proposed ASPA (see Attachment A), which includes a map, photos and a list of relevant publications.

If the CEP agrees that the area merits special protection, Germany and the United States of America intend to develop intersessionally a Management Plan for the proposed ASPA in collaboration with all interested parties to be submitted for consideration during CEP XXV.

***Recommendations***

Germany and the United States of America recommend that the CEP:

1. notes the completed prior assessment for a proposed multi-site Antarctic Specially Protected Area at the Otto-von-Gruber-Gebirge (Dronning Maud Land, East Antarctica) at Attachment A
2. agrees that the values within the proposed ASPA merit special protection, as described under Annex V to the Protocol;
3. endorses the development of a Management Plan for the Area, led by Germany and the United States of America; and
4. encourages interested parties to work with Germany and the United States of America informally during the intersessional period in the development of a Management Plan for submission to CEP XXV.