# STELLUNGNAHMEN UND BERICHTE

### The Admissibility of Land-Based Tourism in Antarctica under International Law

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#### 1. Summary of the Findings

An express ban on land-based tourism¹ cannot be inferred from the Antarctic Treaty System. However, it can be concluded from the basic principles of environmental protection and of the research privilege incorporated into the Antarctic Treaty and the Protocol of Environmental Protection to the Antarctic Treaty that – particularly in view of the cumulative effects and in application of the precautionary principle – land-based tourism constitutes a use which is incompatible with the meaning and purpose of this Treaty System due to the undoubtedly high inherent risks.

#### 2. Problem

Tourism in Antarctica has continued to gain ground during the last few decades.<sup>2</sup> The number of tourists is rising steadily.<sup>3</sup> Although the absolute figures

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<sup>&</sup>lt;sup>1</sup> "Land-based tourism" covers tourist activities which would require the establishment of permanent tourist facilities on the Antarctic continent or the islands in the area of 60° South Latitude (see Art. VI Antarctic Treaty and Art. 1 b and Art. 3 Protocol of Environmental Protection). It therefore does not include tourist activities which use scientific research stations as their base. The problem of the legal admissibility of the latter would need further examination.

<sup>&</sup>lt;sup>2</sup> Thomas G. Bauer, Tourism in the Antarctic: Opportunities, Constraints and Future Prospects, New York/London/Oxford 2001, 1.

have remained low in relative terms considering the size of Antarctica, tourism has already developed into a rapidly expanding and diversifying industry. 5

Just like any other human activity in Antarctica, tourism has a negative impact on the Antarctic environment. Pollution (waste, transport) plays a key role, as does the damage done to Antarctica's flora (e.g., due to the mechanical destruction of mosses and lichens) and fauna (e.g., disturbance of animals in their breeding grounds). Despite the continent's size, this can have a lasting impact on the ecosystems, as tourism is concentrated in certain areas and at certain times of the year and thus has a particularly detrimental impact on sensitive coastal areas.

The establishment of land-based tourism facilities would further aggravate this problem. Land-based tourism differs from the current ship-based and air-borne tourism in that permanent facilities and camps would be built on the continent and the islands to provide accommodation for tourists. It would therefore involve the permanent presence of humans which could lead to greater damage to flora and fauna and thus to the Antarctic ecosystem. Furthermore, the creation of an infrastructure would incur risks which go beyond the usual damage done by tourism. Permanent land-based facilities would also inevitably increase the volume of transport of both tourists and supplies by ship and aircraft.

The introduction of pathogens is also problematic.<sup>11</sup> In addition, land-based tourism will most likely be concentrated in the region close to the coast which is partly ice-free in summer and which is also home to the overwhelming majority of the animals and plants, as well as to all research stations.<sup>12</sup> Not least for this reason, increased environmental damage – above all also due to the cumulative effects of tourist and scientific activities – is to be feared.<sup>13</sup>

<sup>&</sup>lt;sup>3</sup> For example, the number of tourists travelling to Antarctica by ship rose from approx. 15,000 in the 1980s to 84,000 in the 1990s. For these and other statistics cf. Bauer (note 2), 91 et seq.; furthermore Laura Pineschi, Tourist Activities and the Protection of the Antarctic Environment: Current Obligations and Possible Future Developments, in: Francesco Francioni (ed.), International Environmental Law for Antarctica, Milano 1992, 175, 178; Kees Bastmeijer/Ricardo Roura, Regulating Antarctic Tourism and the Precautionary Principle, American Journal of International Law 98 (2004), 763 et seq.

<sup>&</sup>lt;sup>4</sup> Cf. Bastmeijer/Roura (note 3), 765.

In 1998/99, a turnover of US\$ 39 million or more has been estimated, cf. Bauer (note 2), 95; cf. also Davor Vidas, Antarctic Tourism: A Challenge to the Legitimacy of the Antarctic Treaty System?, IARP Publication Series, No. 6, 1992, 8-9.

<sup>&</sup>lt;sup>6</sup> For the problems posed by tourism in general, cf. also Ian E. Nicholson, Tourism in Antarctica, in: Rüdiger Wolfrum (ed.), Antarctic Challenge II, Berlin 1986, 191, 193 et seq.; Jörn Axel Kämmerer, Die Antarktis in der Raum- und Umweltschutzordnung des Völkerrechts, Berlin 1994, 121.

<sup>&</sup>lt;sup>7</sup> Pineschi (note 3), 179; Kämmerer (note 6), 121.

<sup>&</sup>lt;sup>8</sup> Cf. Vidas (note 5), 9, 11.

<sup>&</sup>lt;sup>9</sup> Pineschi (note 3), 179.

<sup>10</sup> Ibid.

<sup>11</sup> Cf. Nicholson (note 6), 194.

<sup>&</sup>lt;sup>12</sup> Kämmerer (note 6), 121.

<sup>&</sup>lt;sup>13</sup> Bastmeijer/Roura (note 3), 765; Nicholson (note 6), 192, he spoke as early as 1985 of "worrying signs of cumulative adverse impacts" as a result of tourism.

#### 3. Legal Admissibility of Land-Based Tourism

#### 3.1. Antarctic Treaty (AT)

The non-admissibility of land-based tourism cannot be inferred from the AT on its own.

Rather, the Treaty assumes that such activities which serve peaceful purposes are, in principle, admissible (Art. I (1) of the AT). Under the Treaty System, activities such as tourism can be classified as a peaceful but "neutral use", because they are neither banned as activities of a military nature nor can they be regarded as a privileged activity. The latter category is reserved for research (cf. Art. II, III of the AT as well as Art. 2 of the Protocol of Environmental Protection<sup>14</sup>). However, it is clear from Art. I (2) of the AT that Antarctica is not exclusively restricted to research.

#### 3.2. Protocol of Environmental Protection

Viewing the AT and the Protocol in conjunction gives grounds for assuming that land-based tourism may be regarded as non-admissible under international law

Although tourist activities are not banned completely under the AT, the Contracting Parties are urged under Art. X of the AT to ensure that any activity, also on the part of third parties, do not run contrary to the principles or purposes of the Treaty. These principles include the possibility of permissible research activities and – as testified by the Protocol – protection of the Antarctic environment. However, permitting land-based tourism, as a new form of tourism in qualitative terms, is contrary to both principles due to the special impact and risks involved.

#### 3.2.1. Restrictive Objectives of the Protocol (Art. 2 of the Protocol)

In Art. 2 of the Protocol, the Antarctic ecosystem, including dependent and associated ecosystems, are placed under comprehensive and thus very far-reaching protection (ecosystem approach).<sup>17</sup> At the same time, Antarctica is designated a natural reserve, devoted to peace and science.

<sup>&</sup>lt;sup>14</sup> 30 ILM 1461 (1991); Federal Law Gazette 1994 II 2478.

This also applies under Art. 3 of the Convention on the Conservation of Antarctic Marine Living Resources, 19 ILM 841, Federal Law Gazette 1982 II 420.

According to Georg Dahm/Jost Delbrück/Rüdiger Wolfrum, Völkerrecht Volume I/2, Berlin 2002, 2<sup>nd</sup> edition, Section 138, 3.

<sup>&</sup>lt;sup>17</sup> Cf. in detail Jörg P o d e h l , Das Umweltschutzprotokoll zum Antarktisvertrag als Ergebnis der Verhandlungen über die Rohstoffnutzung in der Antarktis, Dissertation, Bonn 1993, 55.

### 3.2.2. Violation of Environmental Principles (Art. 3 (4) in Conjunction with Art. 3 (1) of the Protocol)

Although the Protocol – for example Art. 3 (4), 8 (2), 15 (1) (a) – expressly assumes that tourism in general is among the permitted activities, land-based tourism constitutes a new form of tourism which, in view of the precautionary principle, is not compatible with the environmental principles set forth in Art. 3 (1) of the Protocol due to the new risks it involves.

Under Art. 3 (4) of the Protocol, tourist activities must be conducted in a manner consistent with the principles enshrined in Art. 3 of the Protocol. These include, going on from Art. 2 of the Protocol, the conservation of Antarctica's ecosystems for research and for their intrinsic value.

As already stated, however, it can safely be assumed that land-based tourism will lead to a new kind of risk to the Antarctic environment. It could give rise to an environmental risk of an unprecedented magnitude due to the problems referred to, in particular the cumulative effects and the longevity of the effects on the highly sensitive ecosystems.

On the basis of the precautionary principle applicable in the Antarctic Treaty System, the Protocol should therefore be interpreted restrictively and as banning land-based tourism *per se*. Not only the extreme vulnerability of the Antarctic ecosystem but also the fact that the Contracting Parties have already applied the precautionary principle on one occasion, namely to restrict mineral resource activities, would indicate that an application restricting certain tourist activities *per se* and thus a broad interpretation of the precautionary principle would be desirable. Furthermore, the application of the precautionary principle in the case of particularly dangerous activities whose impact has not yet been researched in depth, is in line with the proactive approach of the Antarctic Treaty System and in keeping with the objectives of the Protocol.<sup>21</sup> Besides of this it cannot be claimed that an environmental impact assessment (EIA) (Art. 8 (2) of the Protocol in connection with Annex I) which so far represents the main implementation of the precautionary principle,<sup>22</sup> can do full justice to this very principle, particularly with regard to

Land-based tourism is an activity defined by Art. 3 (4) of the Protocol as it involves either expeditions to or with stations in Antarctica, i.e. constitutes an activity defined by Art. VII (5) of the AT for which notice must be given to the other Contracting Parties. This element of Art. 3 (4) of the Protocol is thus fulfilled. Under Art. 3 (4) (a) of the Protocol, activities should "take place in a manner consistent with the principles in this Article". This therefore mainly refers to the principles in Art. 3 (1) of the Protocol.

Art. 3 (1) talks of the "intrinsic value of Antarctica, including its wilderness and aesthetic values".

Art. 7 of the Protocol can certainly be regarded as an expression of the precautionary principle. According to Laura Pineschi, The Madrid Protocol on the Protection of the Antarctic Environment and Its Effectiveness, in: Francesco Francioni/Tullio Scovazzi (eds.), International Law for Antarctica, The Hague/London/Boston 1996.

Cf. also Bastmeijer/Roura (note 3), 772, 777 et seq.

Niels Krüger, Anwendbarkeit von Umweltschutzverträgen in der Antarktis, 2000, 22.

land-based tourism. The real risks of this kind of tourism cannot be assessed adequately by an EIA. In particular, it is almost impossible, both in practical and conceptional terms, to gauge the cumulative effects in an EIA.<sup>23</sup>

Incidentally, the conclusion that, viewed as a whole, the AT and the Protocol give grounds for assuming that land-based tourism is non-admissible under international law<sup>24</sup> is also supported by other declarations under international law, such as the Guidelines on Biodiversity and Tourism Development within the framework of the Convention on Biological Diversity (CBD) which states: "In vulnerable ecosystems (...) tourism should be restricted and where necessary prevented."

## 3.2.3. Erosion of the Research Privilege and of the Balance between the Freedom to Carry Out Research and Environmental Protection (Art. 3 (4) (a) in Conjunction with Art. 3 (1), (3) and Art. 2 of the Protocol)

Furthermore, the actual convergence or indeed parity of status of land-based tourism and research with regard to environmental damage and the actual hindrance of research in key areas will also inadmissibly erode and restrict the research privilege laid down in the AT and set forth in greater detail particularly in Art. 2 and 3 (1), (3) of the Protocol.

In numerous AT provisions,<sup>26</sup> and particularly at the heart of the Protocol,<sup>27</sup> research is granted privileges by the Antarctic Treaty System. If one looks at this privilege in conjunction with the comprehensive approach to environmental protection contained in Art. 3 (1) of the Protocol, one can discern a fine balance between environmental protection and the freedom to research in the Protocol which consists in allowing research activities under strict conditions.<sup>28</sup> This is not only in keeping with the main objective of the AT, namely to allow more research, but is also justified by the recognized benefits of research for the common good.<sup>29</sup>

Permanent land-based tourist facilities would obtain a factual status similar to that of research stations in the Antarctic. When it comes to risks to the environment, we can probably assume that tourism causes greater damage to the environ-

 $<sup>^{23}</sup>$  Bastmeijer/Roura (note 3) write, "In our view, the assessment of cumulative impacts is one of the gaps in the existing EIA process as applied to Antarctic activities."

More restrictive Bastmeijer/Roura (note 3), 773.

CBD Guidelines on Biodiversity and Tourism Development, UNEP/CBD/COP/7/21, Annex, para. 45; cf. <a href="http://www.biodiv.org/programmes/socio-eco/tourism/guidelines.asp">http://www.biodiv.org/programmes/socio-eco/tourism/guidelines.asp</a>.

For example in Art. II and Art. III of the AT.

<sup>&</sup>lt;sup>27</sup> Cf. Art. 2, 3 (1) and (3) of the Protocol.

<sup>&</sup>lt;sup>28</sup> Every research activity must comply with Art. 3 (4) of the Protocol and, for example, go through the process of environmental screening and impact assessments set forth in Art. 8 (2) of the Protocol.

<sup>&</sup>lt;sup>29</sup> In Art. 3 (1) of the Protocol, research is referred to as "essential to understanding the global environment".

ment than research stations.<sup>30</sup> However, in contrast to research, tourism is of no direct benefit to the common good and there is no justification for it having a similarly high or even greater impact on the environment. Actual convergence or parity of status of tourism and research is therefore, also in accordance with the wording of the Protocol, not in keeping with the principles of the Treaty System.

It must also be remembered that research is likewise granted priority under law in any conflicts of use (cf. Art. 3 (3) of the Protocol). Despite this legal protection, however, an actual hindrance to research by land-based tourism is to be feared. This is particularly true in the light of the concentration of both research and tourism in a few special areas. Land-based tourism thus inevitably increases the changes to the original ecosystems already caused by humans, thus harming both the Antarctic as an object of research and research itself in contravention of the Treaty objectives.

### 4. Annex: Provisions which Would Be Applicable to Land-Based Tourism in the Case of Its General Admissibility

If one does not follow the findings that land-based tourism *per se* violates the treaty principles, in addition to Art. 3 (4) (b) of the Protocol (cancellation and modification of activities), the provisions on environmental screening and impact assessments (Art. 8 of the Protocol in conjunction with Annex I to the Protocol), as well as the provisions on contingency plans (Art. 15 of the Protocol) apply to land-based tourism.<sup>31</sup>

With regard to EIAs, the basically commercial aims of tourism must be taken into consideration (Art. 3 (2) (a), Annex I of the Protocol). This, in general, leads to even stricter assessment standards than those applied to research projects. Likewise, the waste provisions in Annex I to the Protocol in accordance with Art. 1 (1) of Annex III have to be complied with.

The ban on tourist facilities in Antarctic Specially Protected Areas (ASPAs) contained in Art. 3 (4) of Annex V of the Protocol is also important. As ASPAs may only be entered in exceptional cases for research purposes (Art. 3 (4) in conjunction with Art. 7 of Annex V of the Protocol), the extension of such areas in ecologically sensitive regions could be the way to deal pragmatically with the risks posed by land-based tourism to special areas.

Besides of this the designation of Antarctic Specially Managed Areas (Art. 4 of Annex V to the Protocol) is a legal option which may help prevent cumulative effects and help monitor conflicts of use with research activities.

<sup>&</sup>lt;sup>30</sup> The reasons for this are mainly the greater need for transport, the greater fluctuation in people, as well as the inexperience of tourists compared to scientists.

<sup>&</sup>lt;sup>31</sup> This is dealt with in detail by Kees Bastmeijer, Tourism in Antarctica: Increasing Diversity and the Legal Criteria for Authorisation, New Zealand Journal of Environmental Law 7 (2003), 85 et seq., which, however, expressly points out the shortcomings in the existing system.