Prof. Bert Koenders Chair of the Advisory Council on International Affairs P.O. Box 20061 2500 EB The Hague

Date\*\* February 2024ReRequest for advice on civil-military developments in the space domain

Dear Professor Koenders,

The use of the space domain, for both civilian and military purposes, has become an essential part of our daily lives. In order to function here on Earth, Dutch society has become highly dependent on technology and applications in outer space. For example, we find our way around with the help of satellite navigation systems, we rely on satellites for internet and phone communication, and our actions are guided by data obtained by means of observation from outer space. Key sectors and services in our society, such as commerce, traffic, the banking system, security and agriculture, depend on technology in outer space.

The same is true for the defence sector. The data needed for position, navigation and timing (PNT), communication and earth observation for the purpose of the information-driven operations of our armed forces and those of our allies is obtained from satellites. The use of outer space is a prerequisite for practically all forms of military action, and this use will increase significantly in the years ahead. The loss of or an interruption in satellite signals, whether accidental or intentional, has a disruptive effect on both society and on the armed forces.

For some time now the Netherlands has played a role in the use of, application of and participation in endeavours in the international space domain. For example, the European Space Research and Technology Centre (ESTEC) has been based in Noordwijk for many years. More recently the Netherlands has been positioning itself more emphatically as an innovative player in the space sector (including the military dimension), by way of high-tech sensors for earth observation, independently developed small satellites that have successfully been sent into orbit around the Earth, and laser satellite communication.

The space domain is highly dynamic. We are witnessing a tendency, for example, to launch large numbers of small, cheaper satellites wherever possible, rather than relatively large and expensive ones.

Thanks to technological developments, the miniaturisation of satellites, lower launch costs and increased numbers of commercial providers, space activities are on the rise, and it is becoming easier and more attractive for countries (and possibly also non-state actors) to launch satellites.

At the same time, the growing use of outer space on a global scale has led to an increased number of threats. This is due in part to countries like Russia and China, which have developed numerous counterspace capabilities that enable them to manipulate, disable or even destroy other countries' satellites. An example of this is Russia's destruction of one of its own satellites with an anti-satellite weapon in November 2021. This action resulted in a considerable amount of space debris, or 'space junk'. With these developments – the proliferation of counterspace capabilities, the growing quantity

of space debris and the increased number of commercial providers – space is becoming increasingly contested, congested and competitive.

Internationally, NATO underscored the importance of the use of outer space in November 2019 by naming it as its fifth operational domain (alongside land, sea, air and cyberspace). For decades the EU has been a relevant global player in the space domain, with its own satellite programmes for satellite navigation (Galileo), earth observation (Copernicus) and Space Surveillance and Tracking (EU SST). It will soon introduce its own system for secure satellite communication (IRIS<sup>2</sup>). In March 2023 the EU published the Space Strategy for Security and Defence (EU SSSD). The Foreign Affairs Council approved conclusions on the previously published EU space strategy. And within the UN, on behalf of the government the Ministry of Foreign Affairs is actively taking part in international talks on the peaceful use of outer space (COPUOS) and on responsible conduct in space and the prevention of an arms race in outer space (PAROS).

The deteriorating global security situation compels the Netherlands and Europe to take more control of our own security, including in outer space. Various forums around the world are working to improve the resilience of the infrastructure and processes on which the space domain depends. Maintaining open strategic autonomy through capacity building and by bolstering resilience (and the deterrent effect it has) is crucial for the safe use of space infrastructure, now and in the future. The war in Ukraine – where a major part of the intelligence used comes from satellites – illustrates the importance of space capabilities.

As a result, there has been a structural increase in demand for military satellite capabilities that are sufficiently resistant to attacks by state actors.

Nationally, there is also growing interest in the use of outer space. For example the Minister of Economic Affairs and Climate Policy, whose ministry has the coordinating role in this area, joined with the Minister of Education, Culture and Science and the Minister of Infrastructure and Water Management to inform the House of Representatives about the key aspects of the Netherlands' space policy.

The letter to parliament from the Minister of Foreign Affairs on the introduction of space security policy, the notifications to parliament by the Minister of Defence of the launch of military satellites, the Defence Space Agenda, and the growing use of operational satellite capabilities show that these two ministries are becoming more active in the space domain.<sup>1</sup> In view of this evolving and expanding interministerial involvement in the space domain, former minister Maria van der Hoeven is developing a long-term space agenda at the request of the Minister of Economic Affairs and Climate Policy, with the collaboration of all the ministries involved in the space domain, as well as relevant knowledge institutions and the industry.

The Ministry of Defence and of the Ministry of Foreign Affairs are pleased that the AIV has included security developments in the space domain in its work programme for 2023-2025. In the light of the new geopolitical context, the renewed and growing tensions between the major space powers and the conflicts that this may spark, and bearing in mind the upcoming long-term space agenda and the governance structure it proposes, we ask the AIV to address the following questions:

How does the Netherlands' involvement in various international consultative forums on the use of outer space and on space security relate to changing geopolitical relations?

<sup>&</sup>lt;sup>1</sup> Parliamentary Papers 24 446 nos. 74, 77, 78 and 84, 27 830 no. 405, 34 919 no. 80 and 36 124 no. 10.

What are the strategic risks of these changing relations for Dutch space security policy? What are the preferred policy responses to mitigate these risks, and what strategic standpoint would the AIV propose to this end?

What would the best approach be for the Netherlands, in collaboration with NATO and the EU, towards the operationalisation of open strategic autonomy and the peaceful use of outer space, with due regard for Dutch military, economic and diplomatic interests?

I look forward to reading your advisory letter on these issues sometime in the third quarter of 2024.

Yours sincerely,

Hanke Bruins Slot Minister of Foreign Affairs

and

Kajsa Ollongren Minister of Defence [noot AVT: foutief 'Ministry' i.p.v. 'Minister' in het Nederlands]