# Open Skies in turbulence, a well functioning treaty is endangered by outside developments

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#### **Abstract**

Today the Treaty on Open Skies is confronted with contradictory developments: Continuing adherence of all parties, in particular Russia and the United States to the treaty and preparations for modernisation of the technical monitoring capabilities on the one hand, while the general support for conventional arms control and military confidence building in the OSCE region declines. Since January 2011 an intervention of Turkey over the accession application of Cyprus has prevented regular sessions and decisions of the Open Skies Consultative Commission (OSCC). The treaty is taken hostage for an unsolved status conflict which has much wider dimensions. Since the impasse in the OSCC could not be solved on the diplomatic level so far (Nov. 2011), high level political intervention is needed to save the treaty from erosion.

#### 1. Introduction

The Treaty on Open Skies has opened the full territory of its member states "from Vancouver to Vladivostok" to cooperative aerial observation flights. It was originally designed to support the monitoring of massive reductions of conventional forces in Europe after the end of the cold war. Between 24 March 1992 (the date of its signature) and December 2001 some 400 bilateral trial flights were carried out. These gave a valuable insight into the force reductions and force relocations of Russian surplus military material beyond the Urals.

Since the entry into force of the treaty in 2002 observation flights under Open Skies are mainly used to realise the second objective: contributing to the general transparency of military potentials in the still shaky relations between NATO member states and the Russian Federation.

The Treaty grants each party the right to observe the full territory of other treaty parties and the obligation to receive flights from other parties, within a quota system. The resolution of the imaging sensors (optical and video cameras, thermal and RADAR imaging sensors) allows for a reliable identification of major military equipment like tanks and combat aircraft, but not for detailed analysis. Open Skies flights can detect major actions, infrastructure and force build-up at strategically important levels.

So far, all NATO states (apart from Albania) participate in the Treaty, as well as the Russian Federation, Belarus, Georgia, Ukraine, Bosnia-Herzegovina, Finland and Sweden. Beyond Europe the treaty also covers the vast territories of North America and the Asian part of the Russian Federation, which are not accessible to on-site inspections under the Treaty on Conventional Forces in Europe (CFE).

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Due to an inter-alliance understanding (which was initiated by the United States) NATO states do not overfly each other. Flights by NATO states cover mainly the territory of Russia and the Ukraine, whereas Russia (with Belarus) exploits the full annual quota of 42 flights to observe virtually all NATO states<sup>2</sup>.

Thus there is a genuine continuing interest on both sides in this instrument of military transparency. Russia, for instance, has decided to modernize its Open Skies aircraft fleet at considerable expense (some 220 million USD). The US has increased its number of flights over Russia and Belarus to 16 in 2011. The US also acquires copies of imagery from flights by other parties covering Russia and Belarus.

However, the failure of the informal talks to break the current deadlock on the CFE Treaty<sup>3</sup> and the impasse of attempts to adapt and expand the Vienna Document on confidence and security building measures create an unfavourable environment, which might eventually also endanger the Open Skies Treaty. In the short term the crisis over the treatment of Cyprus' accession application needs to be resolved.

This paper is an update to an article in Helsinki Monitor.<sup>4</sup> Additional information on treaty history, treaty provisions, technical implementation and eventual extended applications are given in sources 5-8 and in the literature quoted therein.<sup>5 6 7 8</sup>.

# 2. Ten years of treaty implementation – a silent success

The implementation of the treaty has proceeded smoothly since its beginning in August 2002, with very few exceptions. Between August 2002 and December 31, 2010 a total of 739 flights have been carried out. Note that one flight can cover typically 30-50 military sites, providing there is fair weather. This is more than the annual quota of on-site inspections by any party under the CFE Treaty. An average of 30 flight missions per year is shared between two or three observing states. Cooperation between treaty parties in flight preparation and

A full list of all quota flights in the year 2009 is provided in H. Spitzer, News from Open Skies, VERTIC, Brief 8, February 2009, http://www.vertic.org. See publications, serial publications. See also OSCC. DEL/24/11, 13 April 2011.

See e.g. W. Richter, Scheitert die konventionelle Rüstungskontrolle in Europa? SWP-Aktuell 2011/A 44, September 2011, 8 pp. http://www.swp-berlin.org/de/produkte/swp-aktuell-de/swp-aktuell-detail/article/konventionelle\_ruestungskontrolle.html

H. Spitzer, The Open Skies Treaty, in: Helsinki Monitor, 2006, Vol. 17, No. 1, pp. 83-91.

P. Dunay et al., Open Skies: A Cooperative Approach to Military Transparency and Confidence Building, UNIDIR, 2004, pp. 1-311.

G. Petrie and H. Spitzer, Open Skies, in: GEO Informatics, July/August 2007, pp. 24-29.

H. Spitzer, The Second Review Conference of the Open Skies Treaty, in: VERTIC, Trust & Verify, No. 130, July-September 2010, http://www.vertic.org, see publications, serial publications.

D. Lindley, Cooperative Airborne Monitoring: Opening the Skies to Promote Peace, Protect the Environment, and Cope with Natural Disasters, in: Contemporary Security Policy, Vol. 27, No. 2 (August 2006), pp. 325-343.

execution has become professional routine. Thus we have travelled a long way since the time when an US espionage aircraft was shot down over the Soviet Union in 1960.

However, the implementation practice is rarely noted by the media or the political establishment. Open Skies implementation has been a silent success in simply adding a layer of transparency in an arena with many other security priorities.

## 3. Technical modernisation

Initially only black-and-white film cameras with a resolution (ground-sampled distance) of 30 cm have been installed and used on the observation aircraft, some of them being old models with technology dating back to the 1970s. Modernisation in reaction to the digital revolution became an issue.

In 2006 the Informal Working Group on Sensors (IWGS) of the Open Skies Consultative Commission (OSCC) started to explore the technical and legal preconditions for the introduction of digital aerial cameras for treaty use. It took four years of extensive discussions and practical tests to overcome all reservations, mainly on the part of Russia. In 2010 the OSCC decided that modern commercially available digital aerial cameras could be used in the treaty category of video cameras. This time the Russian Federation took the first practical step by ordering three state of the art digital aerial cameras (model DMC II<sub>140</sub> from Intergraph/ZI, Germany). The cameras will be installed in 2012 on the new Russian Open Skies aircraft, a Tupolev 214, which had its maiden flight in the spring of 2011. The aircraft was presented to the general public at the Moscow Air Show in August 2011. Russia has ordered a second aircraft of the same type. Russia will be the first party to install and use thermal infrared and RADAR imaging sensors. It will thus have the most modern Open Skies aircraft and the most comprehensive sensor suite. This underlines the importance which the Russian government attributes to its Open Skies programme. Several other parties are also exploring or planning the introduction of digital aerial cameras (Norway, Sweden, Turkey, the United States and a group of nine states which operate a joint sensor set (pod group)), whereas others shy away for financial reasons (Bulgaria, Hungary, Romania, Ukraine). Germany, Great Britain and the Czech Republic no longer operate Open Skies aircraft, again for budgetary reasons.

## 4. The Review Conference of 2010

The Treaty mandates that parties meet for a review conference every five years. The second review conference was held in Vienna, 7-9 June 2010, with the United States chairing the event. Representatives of the 34 parties to the Treaty participated. There was no participation by Non-Governmental Organisations in

These cameras can have up to four colour channels (blue, green, red, near infrared) as well as panchromatic (black and white) imaging capabilities.

contrast to the United Nations (UN) arms control conferences and ministerial meetings of the Organisation for Security and Cooperation in Europe (OSCE). Open Skies diplomacy is invisible to the general public.

The focus of the conference was on past and future implementation. All parties expressed their adherence to the Treaty and praised it as a key pillar of cooperation within the Euro-Atlantic security architecture as a whole. Steps towards technical modernisation were endorsed.

The conference remained vague in its final document on any outreach to other regions of the world and on the use of Open Skies resources in additional fields, like environmental monitoring. The conference refrained from mandating the OSCC to elaborate concrete frameworks on the facilitation of extraordinary observation flights on request from relevant bodies of the OSCE or from other international organisations like the UN. The option of such flights is mentioned in an appendix to the Treaty. Also potential contributions in the area of transnational security issues would require fresh innovative approaches in and beyond the OSCC.

In conclusion, the governing bodies of the regime have so far acted in a rather conservative way: The review conference has reviewed but not mandated, the Consultative Commission takes decisions relevant to the implementation of the Treaty as such, but hesitates in exploring new grounds in a more open setting like the Corfu Process.

By and large, the conference proceeded in a consensual and harmonious way. Two clashes occurred, however: One between the Russian and Georgian delegations over the status of Abkhazia. In May 2010 Russia had refused to accept the flight plan for a joint Romanian/US flight over southern Russia, which would have been within 10 km of the border of Abkhazia. Georgia and others claimed that such a flight plan would be legal, because they see Abkhazia as a part of Georgia, which is a party to the Treaty. Russia has recognized Abkhazia as an independent state and sees it as a non-party to the Treaty. The Russian delegate threatened that the submission of similar flight plans would be treated as wilful provocation and might lead to similar consequences as in the case of the CFE Treaty, i.e. suspension. Whereas this clash remained at an oral level, the clash concerning the status of Cyprus left traces in the journal of the conference. 12 13 14

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Final Document of the Review Conference on the Implementation of the Treaty on Open Skies, 9 June 2010, OSCC.RC/39/10, www.osce.org/documents/S9/2010/06/44736\_en.pdf

The Treaty mandates that flights have to remain at a distance of at least ten kilometres from the borders of non-parties.

Final Document of the Review Conference on the Implementation of the Treaty on Open Skies, 9 June 2010, OSCC.RC/39/10, www.osce.org/documents/S9/2010/06/44736\_en.pdf

Interpretative Statement on the Final Document of the Second Review Conference, Journal of the Second Review Conference, OSRC(2).JOUR, 7-9 June 2010, Annex 14, OSCC+

Statement by the Delegation of Turkey, OSRC(2).JOUR, 7-9 June 2010, Annex 15, OSCC+

## 5. The Cyprus issue – Open Skies taken hostage

Disagreements surrounding the Republic of Cyprus' application for accession have plagued Open Skies diplomacy from the very beginning. Since January 2011 the issue has evolved into a manifest crisis which threatens to block decisions on future treaty implementation.

Shortly after its entry into force, in May 2002, the Republic of Cyprus applied for accession to the Treaty. The Open Skies Consultative Commission, which decides by consensus, discussed the application on 22 July 2002, but it could not reach a consensus due to a veto by Turkey. Turkey has never recognized the (Greek) Republic of Cyprus, although the republic participates in the OSCE and is a member state of the European Union. From mid 2002 until the end of 2010 the item "Accession to the Treaty: Draft decision on the accession of Cyprus (OSCC.DD/12/02)" had been on the agenda of the OSCC. The issue has boiled over at both review conferences which have so far been held. In 2005, Turkey refused to approve the draft final conference document, which stated that the application of Cyprus remains on the agenda of the OSCC. <sup>15</sup> As a consequence, the conference ended without an agreed final document.

The final document of the 2010 conference used somewhat less direct language: "State parties ... note that one application for accession is on the agenda of the Open Skies Consultative Commission". However, the delegations of nearly all parties, except Turkey and Bosnia-Herzegovina, signed an interpretative statement of the Final Document stating "We acknowledge that the application of Cyprus, submitted on 30th May 2002, remains on the agenda of the OSCC and express hope that consensus can be reached on this application in the near future. We support Cyprus' application to the Open Skies Treaty". <sup>16</sup>

This was not well received by the Turkish delegation and in Ankara. The delegation issued a national statement, which reads: 17

"...It is a source of dismay that an issue that lies outside the scope, mandate and purview of the Open Skies bodies and of the Review Conference has been brought to the Closing Session...Our longstanding policy also remains valid in the framework of the Treaty on Open Skies. Accordingly, the presentation of Cyprus in Open Skies fora by the Greek Cypriot administration is neither legal nor legitimate. In response to the hope expressed in the interpretative statement by a group of States Parties in connection with one application for accession, we wish to emphasize the need for a just and lasting comprehensive settlement of the Cyprus question through a negotiating process at the end of which the legitimate rights and aspirations of the two peoples living in the island should be met."

The reaction from Ankara was even harsher. The Turkish Foreign Minister advised the Turkish delegation to the OSCC to block any agenda of regular

Statement of the chairman of the first Review Conference on the Implementation of the Treaty on Open Skies, OSCC.RC/45/05, 16 February 2005, OSCC+

Interpretative Statement on the Final Document of the Second Review Conference, Journal of the Second Review Conference, OSRC(2).JOUR, 7-9 June 2010, Annex 14, OSCC+

Statement by the Delegation of Turkey, OSRC(2).JOUR, 7-9 June 2010, Annex 15, OSCC+

sessions of the OSCC which would make reference to the application of Cyprus, effective as of 1 January, 2011. Since the remaining parties would not yield to this request, no regular decision-making session of the OSCC could be held between January and October 2011.

Turkey insists that the adoption of the agenda of the OSCC has to be done by consensus and that the application of Cyprus has to be removed from the agenda. It has conceded, however, contrary to the tone of the national statement of 9 June  $2010^{18}$ , that "Turkey does not question the validity of the application of the Greek Cypriot administration" to accede to the Open Skies Treaty, but it considers the application as having been rejected (by its own veto). It claims to be willing to reconsider the application once a general political solution of the Cyprus conflict has been found. Greece and other parties refer to a clause in Article X (2) of the Treaty which gives a right to any State Party to place any issue relating to this Treaty on the OSCC agenda. Greece has so far insisted that Cyprus' application remains on the agenda.

On 24 October 2011 – surprisingly - the OSCC decided on the assignment of flight quota in 2012 as well on the prolongation of previously established rules for certification methodology. This will secure flight activity in 2012. However, it is certain, that the dispute over the agenda will pop up again, thus preventing further decisions – in particular those required for the certification of sensor configurations of the new Russian aircraft. Greece has already announced that it will not approve the agenda of the next OSCC meeting unless the accession application of Cyprus is included. Here the implementation of a treaty which has so far been working well is being held hostage by diverging interests in a status conflict, which has its roots far beyond the treaty. The conflict is also an exemplary demonstration of the current policy of Turkey to establish itself as a major regional power with strong emphasis on the enforcement of national interests.

The world has seen this before. Some of the so-called Istanbul commitments were used by the Bush administration and its NATO allies in the context of adapting the CFE Treaty to press Russia towards a solution of regional conflicts in Moldova/Transnistria and Georgia/South Ossetia/Abkhazia. This did not work. It contributed to the erosion of the negotiations on conventional arms control and was one of the triggering factors for the Russian suspension of the CFE implementation in December 2007.

Clearly, high-level ministerial intervention is needed to prevent a similar erosion process in the case of Open Skies.

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Statement by the Delegation of Turkey to the Open Skies Consultative Commission, OSCC.DEL/29/11, 30 May, 2011.

U. Kühn, From Capitol Hill to Istanbul: The Origins of the current CFE Deadlock. CORE Working Paper 19, Hamburg, Dec 2009, see http://www.core-hamburg.de, publications, CORE Working Papers. See also W. Zellner, H.-J. Schmidt, G. Neuneck (eds.), Die Zukunft konventioneller Rüstungskontrolle in Europa - The Future of Conventional Arms Control in Europe. Nomos 194, Baden-Baden 2009, pp. 1-560.

# 6. Open Skies and nuclear arms control

Progress in nuclear arms control, in particular in the area of tactical nuclear weapons, is a key to overall military stability in Europe. So far, Russia sees its tactical nuclear weapons as a means for compensating for the weakness of its conventional forces.

Open Skies flights are contributing to the monitoring of nuclear forces and respective arms control treaties. They supplement satellite and other surveillance programmes and the crucial on-site inspections. On-site inspections under existing nuclear arms control treaties are severely limited in scope and territorial access. <sup>20</sup> The nuclear forces of France and the UK as well as the tactical nuclear weapons of the US and Russia are not covered at all.

Thus Open Skies flights offer a welcome opportunity to observe all nuclear military and dual-use facilities in the treaty area, including the sites of nuclear capable launchers. At treaty resolution nuclear capable long-range bombers, missile silos and nuclear capable ships can be easily identified, but not individual warheads or nuclear materials. Open Skies flights can yield limited, selective information on launchers of tactical nuclear weapons, which due to their smaller size can be more easily put under cover.

Of course, the nuclear forces and clandestine activities of states beyond the Euro-Atlantic region are outside the reach of the present Open Skies regime.

S.D. Drell and Ch.W. Stubbs have therefore asked to what extent an expanded Open Skies regime could support monitoring and verification which would be needed on the path to a nuclear-free world. They refer to two provisions of the Open Skies Treaty: (a) Article IV entitles the Open Skies Consultative Commission to decide on the introduction of additional sensor categories and improvements to the capabilities of existing sensors. (b) According to Article XVII (5) the OSCC can consider the accession of any state (worldwide) which is willing and able to contribute to the objectives of the treaty.

<sup>20</sup> These treaties include the Treaty on Intermediate-Range Nuclear Forces (INF), the Strategic Arms Reduction Treaty (START) and the New START Treaty (Treaty between the United States of America and the Russian Federation on Measures for further Reductions and Limitations of Strategic Offensive Arms) as well as the Nuclear Non-proliferation Treaty (NPT). The verification of the INF Treaty by on-site inspections was terminated in 2001 after 13 years of implementation. The verification and safeguard measures under the NPT by the International Atomic Energy Organization (IAEO) are limited to checks at non-military nuclear energy installations. They do not cover nuclear weapon production and deployment sites. Only the START and the New START Treaties foresee on-site inspections of nuclear carrier systems of the United States and the Russian Federation with a range above 5500 km. Nuclear capable (dual-use) artillery and combat aircraft, which are deployed in Europe west of the Urals, are covered in principle by the CFE Treaty and its on-site inspections. However, it is difficult to identify their operative designation. No more on-site inspections at deployment sites of such weapons systems are possible in Russia after Russia's suspension of CFE implementation.

S.D. Drell and Ch.W. Stubbs, Realizing the Full Potential of the Open Skies Treaty, Arms Control Today, July/August 2011, accessible via http://www.armscontrol.org

Drell and Stubbs suggest expanding the group of signatory nations which would allow verification access to an increasing fraction of the globe. They also propose to expand the sensor suite under the Treaty to include four additional detector categories:

- 1) Atmospheric Gas Sampling (collection of gas samples for further analysis)
- 2) Particulate/Aerosol Sampling
- 3) Higher-Resolution Optical and Infrared Imaging
- 4) Laser-Illuminated Time-Resolved Imaging Spectroscopy

These are proven technologies with a good potential to support the monitoring and detection of clandestine activities in the field of producing nuclear or chemical weapons and weapon-relevant fissile materials. However, the political obstacles are enormous.

The Open Skies Treaty was negotiated in a particular historic situation by specific partners with a specific purpose (monitoring the military restructuring in Europe with the aim of eliminating the capabilities for large conventional surprise attacks). So far the Treaty has survived because both the US and the Russian Federation profit from it and because there is still enough suspicion and mistrust between the US and some other NATO members, on the one hand, and Russia, on the other. The inclusion of new states parties (in particular further nuclear weapon states) from outside Europe would require a major political breakthrough since both the US and Russia have repeatedly expressed that accession to the treaty should be limited to states participating in the OSCE. The inclusion of major new states parties from outside Europe could complicate or even endanger the rather smooth working of the present regime.

Although the Treaty language allows for improvements to the capabilities of existing sensor categories (i.e. the better resolution of optical sensors) the present Russian position sees the resolution limit of 30 cm as being "enshrined" in the Treaty.

The author sees the inclusion of atmospheric gas and aerosol sampling devices as an important future-oriented transparency measure in support of the verification of the NPT and an eventual Fissile Material Production Cut-off Treaty. Such gas and aerosol sampling would also supplement the international network of radionuclide monitoring stations operated for the Preparatory Commission of a future Comprehensive Nuclear Test Ban Organisation (CTBTO). Further on it would allow extensions into applications for the protection of the environment, an option which is mentioned in the Preamble to the Treaty. The inherent right of data sharing could be realized by installing dual sampling devices: one for the observing and one for the observed party.

## 7. Open Skies and the prevention of war

The Open Skies regime is a very far-reaching transparency agreement of high practical and symbolic relevance which should be seen in its interplay with other security-relevant monitoring and verification schemes. A targeted application of existing verification instruments can contribute to de-escalation in crisis

situations. Such measures enhance international awareness by providing information input for eventual external political intervention.

However, it cannot – like other confidence-building and verification measures – prevent the outbreak of a war, if a determined leadership decides to wage war. This was the case in the Georgia-Russia military conflict of August 2008. The military clash occurred even though Georgia and Russia are parties to the Open Skies Treaty and other relevant European security agreements. <sup>22</sup>

It should be noted that Georgia and Russia resumed their annual mutual over flight in 2010. However, Georgia has decided not to request an observation flight of the territory of the Russian Federation in 2012 because of concerns over the Russian position on flights close to the border of Abkhazia. It is noteworthy that the three Baltic States have acceded to the Treaty. They receive in general one flight annually from Russia and also carry out one observation flight per year over Russia. This indicates that Open Skies flights can be useful in post-war situations and areas of politico-military tension. They can contribute to the prevention of escalation which might end in a military confrontation.

#### 8. Conclusions

Transparency regimes like Open Skies work best within a limited zone of relations between former and potential future adversaries<sup>23</sup>. A mix of residual fears and suspicion, on the one hand, and a sufficient willingness to cooperate, on the other, motivate parties to hold on to the regime. This has worked surprisingly well from the signature of the Treaty in 1992 to the present day in spite of significant changes in the security and geopolitical environment. Both Russia and the US thus exploit the benefits of the treaty by high flight activity and heavy investment in the modernisation of Open Skies resources (on the part of Russia). A drastic improvement in Russia – NATO relations might make the present Open Skies regime superfluous. But this is an unlikely scenario for the time being.

The options offered by the Treaty have not yet been fully exploited both on a technical and a political level. Russia will be the first state to install and operate thermal infrared and RADAR imaging sensors, probably in 2012/2013. Cooperation with the OSCE and other international security organisations on extraordinary flights needs to be sounded out and eventually negotiated.

The regime could obtain additional relevance by the eventual accession of the

An Open Skies flight over Georgia in April 2008 and a CFE on-site inspection in Gori, Georgia, in June 2008 provided clear evidence of the on-going build-up of forces. An OSCE observer mission on 7-10 July 2008 contributed to a temporary de-escalation. Unfortunately the US and EU leaderships did not react in a way which could have prevented the Georgian offensive operation in South Ossetia. See e.g.: Independent International Fact-Finding Mission on the Conflict in Georgia, www.ceiig.ch

D. Lindley, Cooperative Airborne Monitoring: Opening the Skies to Promote Peace, Protect the Environment, and Cope with Natural Disasters, in: Contemporary Security Policy, Vol. 27, No. 2 (August 2006), pp. 325-343.

successor states of the former Yugoslavia (Serbia, Montenegro and Macedonia), as well as Albania, Moldova, Armenia, Azerbaijan and the central Asian republics. Political initiatives and logistical support from states parties would also be helpful in order to ease accession.

The recent blockade of the regular work of the OSCC over Cyprus' application for accession is a serious development. The other parties to the Treaty have to ask themselves whether it pays off to ponder over an accession agenda, which obviously cannot be agreed upon by consensus. The conflict demonstrates that unsolved status questions (like the cases of Cyprus and Abkhazia) which extend far beyond the Open Skies Treaty can endanger the implementation of a treaty which has so far been working well. The issue calls for high-level ministerial intervention and a grain of wisdom on all sides.



The new Russian Open Skies aircraft Tu 214 (Photo: VEGA-M, Moscow, received via US Air Force)