

**Answer of the Federal Government to the Minor Interpellation tabled by the Members of the Bundestag Andrej Hunko, Dr Alexander S. Neu, further Members of the Bundestag and the Left Party parliamentary group of 9 November 2015, received by the Federal Chancellery on 16 November 2015
(Bundestag printed paper 18/6722 of 10 November 2015)**

Drones based on the US Global Hawk model in German airspace

Preliminary remarks of the questioners

According to the Bundeswehr, the US Air Force is planning regular flights of its giant Global Hawk drone in European airspace from October 2015 (bundeswehr.de, 23 October 2015). Germany is among the countries which are to be overflown, with “up to five overflights” per month planned. The background is reportedly the European Reassurance Initiative, which involves measures “to bolster NATO allies”. These measures are intended “to send a visible signal of commitment in and to Europe and to the transatlantic relationship”. The website states that the focus is on the Baltic countries. According to the Bundeswehr, the Federal Government intends to support this US initiative and thus demonstrate that it is a “reliable partner”.

The US Global Hawk drones in Europe are stationed at the US Sigonella base, Sicily. NATO will also have Global Hawk drones there from 2016; it has been stated that they will initially undergo flight tests and certification procedures and have operational capability from 2017 (Bundestag printed paper 18/5538). The multi-billion surveillance programme is being supported above all by the countries bordering Russia, but financed primarily by the United States, Germany, Norway and Italy. 13 NATO members are involved, in particular eastern European countries. The initial outlay for the programme amounts to 1.45 billion euros, with further costs to follow during the operational phase. Many member countries have therefore withdrawn from the programme.

The reconnaissance programme using optical sensors is based on five Global Hawk drones and several transportable ground stations. The first Global Hawk was completed by manufacturer Northrop Grumman in the summer. According to the Italian certification authority, test flights of this “NATO 1” drone can begin in Sicily in the spring of 2016. NATO already practised the deployment of the giant drones last year in a Europe-wide exercise, using US drones of the same type. The Federal Government has also agreed on a drone programme based on Global Hawk. The original intention was for Global Hawk derivatives known as Euro Hawk to be purchased. After costs for the planned acquisition skyrocketed and the Bundeswehr failed to take further certification costs into account, the Federal Ministry of Defence pulled the plug in 2013. However, the project has not been abandoned; the procurement of another Global Hawk derivative, the MQ4-C Triton, is now under consideration.

According to the Bundeswehr’s report, the planned “operating area” for the US drones in the framework of the European Reassurance Initiative is “over the Baltic Sea”. On the way there and back to Sigonella, the drones are to fly over Italy, France and Germany. These overflights “purely for transit purposes” will reportedly take place “at very high altitudes, above 15 kilometres”. In

other words, take-offs or landings in Germany would only take place in emergencies. The time spent in German airspace will reportedly be “approximately one and a half hours” per overflight. The report states that the Federal Government has set up a corridor of restricted airspace “especially” for this purpose. Prior to this decision, the Federal Ministry of Defence carried out an “inter-ministerial assessment” which examined both technical and flight operational issues. Clearance was subsequently issued for the giant drone to use the corridor “irrespective of the type of airworthiness certification” held. Nonetheless, the report states that this was a series of “one-off decisions”, from which “no general regulations for permanent use can be derived”, and that it was only on these grounds that clearance was given for the overflights, for a limited period until the end of January 2016. The sole condition named by the Bundeswehr is that the surveillance and reconnaissance sensors on board would have to be deactivated, which the US government must reportedly confirm in writing. However, an online magazine has written, citing a military blog, that the overflights could not be carried out as planned (heise.de, 28 October 2015). A blogger claims to have learned this “from Nato circles”. According to the blog post, the first flight could not take place because overflight clearance had not been received from the French authorities; NATO reportedly hopes that the flights could begin in November 2015.

Preliminary remarks of the Federal Government

The US European Reassurance Initiative (ERI) encompasses various measures to bolster NATO allies, in particular the eastern members of the Alliance. One of its aims is to send a visible signal of commitment to Europe’s security via a heightened US military presence.

In principle, there is a clear political will in Germany to support the US. Compliance with legal provisions is a prerequisite for any measure in this context.

In the framework of the US ERI, around three to five overflights per month are planned through German airspace to the operating area in eastern Europe and back. The planned route runs from Sigonella (Italy) via France and Germany to the airspace over the Baltic Sea.

The US Global Hawk remotely piloted aircraft to be used for the overflights is stationed in Sigonella.

The requested transit flights are not related to the NATO Alliance Ground Surveillance (AGS) programme, or to the signals intelligence, airborne, wide-area surveillance and reconnaissance system and the related test flight operations of the Euro Hawk Full Scale Demonstrator.

The Federal Government wishes to point out that the following answers reflect its knowledge as at 19 November 2015, which is subject to constant change due to the progressive implementation of the various projects and the evaluation of the results.

1. What details which have not yet been reported by the Bundeswehr can the Federal Government provide with regard to the planned overflights in German airspace by the US Air Force’s giant Global Hawk drone?

On 23 October 2015, the chairpersons of the German Bundestag's Defence Committee and G 10 Commission, the Federal Commissioner for Data Protection and the Minister-Presidents of the *Länder* (federal states) to be overflown (Saarland, Rhineland-Palatinate, North Rhine-Westphalia, Lower Saxony, Bremen, Hamburg, Schleswig-Holstein, Mecklenburg-Western Pomerania) were notified by the Federal Ministry of Defence of the planned overflights by a US Global Hawk remotely piloted aircraft (RPA). No overflights have taken place to date.

2. Where is the restricted airspace which has been announced located (please present this information in such a way that it is possible to identify which urban areas are to be overflown)?

The restricted area established for the planned Global Hawk overflights is indicated in the *Notices to Airmen* of 22 October 2015, *Bekanntmachung über die vorübergehende Festlegung eines Gebietes mit Flugbeschränkungen für militärischen Flugbetrieb* (Notification of the temporary establishment of a restricted area for military flight operations). The planned flight path for the transit flights through German airspace (red line) and the outer boundaries of the restricted area (orange lines) are shown on the diagram below.

3. What is the Global Hawk's concrete operational mission "over the Baltic Sea" and adjacent territories?

The deployments of the US Global Hawk RPA are intended to collect and analyse reconnaissance data to support the Baltic countries and to bolster NATO allies, particularly the countries on NATO's eastern border. One of the aims is to prevent a destabilisation in central and eastern Europe, with a heightened US military presence sending a visible signal of commitment in Europe to Europe's security and the transatlantic relationship.

4. On what activities by which governments are the US drones to collect intelligence, to the knowledge of the Federal Government, in the flights "over the Baltic Sea"?

The Federal Government has no information on this matter.

5. What is the Global Hawk's planned operating area (please specify the countries and/or waters concerned and those bordering on them)?

The Federal Government has no information on this matter.

6. Which states' territories could, in this context, be targeted by the Global Hawk's electro-optical and signals intelligence sensors and other surveillance technology (please do not limit the answer to any surveillance plans which may already exist, but instead respond with a view to what is technically feasible)?

The Federal Government has no information on this matter.

7. When and by whom were the overflights requested, when did talks or negotiations on them take place, and when was clearance for them finally given?

The Headquarters of the United States Air Forces in Europe (HQ USAFE) submitted a request on 27 July 2015 for German airspace to be allocated for transit flights by a Global Hawk RPA. In addition to the exchange of information which is constantly taking place, coordination discussions took place on 5, 20 and 27 August 2015, as well as on 2 September 2015.

The allocation of German airspace for transit flights was authorised on 28 October 2015 as a one-off decision, initially for a limited period ending on 31 January 2016.

8. What agreements were reached regarding the procedures for the overflights?

All necessary measures relating to the carrying out of the planned overflights were laid down in an operating agreement signed by the competent authorities within the remit of the Federal Ministry of Defence, the Federal Ministry of Transport and Digital Infrastructure, DFS Deutsche Flugsicherung GmbH, EUROCONTROL, and the United States Air Force (USAF).

a) On what basis is it determined precisely when overflights through German airspace take place?

The planning and notification of the overflights, including all necessary data, takes place in line with the operating agreement. This includes the exact times of the overflights.

b) What dates and times have already been arranged?

The Federal Government has no information on this matter.

c) If this is to take place on an ad hoc basis, which German authorities are to be notified when and by whom?

Under the operating agreement, HQ USAFE will send the necessary data to the competent authorities within the remit of the Federal Ministry of Defence and the Federal Ministry of Transport and Digital Infrastructure at least 72 hours prior to a planned overflight.

9. What procedures are in place for potential incidents or emergency landings of the Global Hawk, and where could emergency landings take place?

Procedures for potential incidents and emergency landings were established in the operating agreement. These include the turning back of the unmanned aerial vehicle or the initiation of an approach procedure to one of the emergency landing sites. The Nörvenich and Schleswig military airfields have been designated as emergency landing sites in Germany.

10. What electro-optical or signals intelligence sensors, or other surveillance technology, produced by which manufacturers, are carried by the US drones, to the knowledge of the Federal Government?

The Global Hawk to be used for the overflights is equipped with radar sensors, optical sensors and signals intelligence sensors.

The Federal Government has no further information on this matter.

11. From where and by what means are the Global Hawks controlled by the US Air Force?

a) What does the Federal Government know about which mobile or fixed ground stations equipped for flight guidance and control will control the overflights, and where are these ground stations located?

During the departure from and approach to Sigonella military airfield, the RPA will be controlled by the control station there. The Mission Control Element at Beale Air Force Base, California, will control the RPA during the planned transit flights.

b) To what extent will the drone flights (even partially) be accompanied or observed by manned aircraft?

There are no plans for the RPA to be accompanied by manned aircraft during the planned overflights.

12. By what means and using which satellites is the collected data transmitted to the ground stations, and where are communication and analysis components located (Mobile General Ground Stations, Transportable General Ground Stations or Deployable UAV Control Elements)?

The Federal Government has no information on this matter.

13. Who established the data link used to transmit the data, and what does this link consist of?

The Federal Government has no information on this matter.

14. Which governments are entitled to what level of access to the data collected, and according to what criteria is raw or processed data transmitted to NATO?

The Federal Government has no information on this matter.

15. To what extent and with what result did the "inter-ministerial assessment" carried out by the Federal Ministry of Defence for the new overflights draw on those assessments, described in the same terms, which took place last year in the framework of the Unified Vision trial and which also led to a "one-off decision"?

The current clearance for the planned overflights of a Global Hawk RPA, in the form of a one-off decision, is based on the updated assessments carried out in connection with the overflight clearance issued for NATO's Unified Vision trial in 2014.

16. On the basis of what "detailed information (flight profile, air route and flight procedures)" was the assessment carried out of whether that process "or parts of it can also be extended to other unmanned aerial vehicles" (in this case the new Global Hawk overflights)?

As the planned overflights are to be made by the same Global Hawk RPA as in the case of NATO's Unified Vision trial in 2014, the procedures, processes and experience of the past overflight clearance were an important foundation for the new process. The assessment of the documentation covered all necessary details regarding technical and flight operational information, operating procedures and use of airspace.

17. How were the Global Hawk's technical characteristics and airworthiness (including collision avoidance procedures) examined before overflight clearance "irrespective of the type of airworthiness certification" was issued by the Federal Ministry of Defence?

As part of the preparations for the Unified Vision trial in 2014, the Global Hawk RPA's technical characteristics and airworthiness were verified in cooperation with the USAF, taking the standard operating procedures into consideration. In the new clearance issuance process, a review of the documentation revealed no differences.

18. Has the US government already made clear that it intends to request clearances for overflights for a limited period even after the end of January 2016, and what is the Federal Government's position on this?

The Federal Government currently has no information about a potential request for an extension of the overflight clearance which has been issued.

19. What further requests for overflights by which drones have already been submitted to the Federal Government by which governments, and what decisions have been taken on these requests?

The Federal Government has received no requests of the kind specified in the question.

20. What does the Federal Government know about whether the US government is planning further Global Hawk operations in Europe (even if Germany will not be overflown)?

The Federal Government has no information on this matter.

a) What does the Federal Government know about the French government's reasons for not issuing clearance for the overflights as planned?

To the knowledge of the Federal Government, the plans for clearance of the overflights are not yet complete on the French side.

b) What information does the Federal Government have about whether the French government has since issued clearance for Global Hawk overflights and whether this clearance is still subject to restrictions (and if so: what restrictions)?

Please see the answer to question 20 a).

c) What does the Federal Government know, due to its participation in NATO's Unified Vision trial, about the reasons why the Global Hawk was unable to receive "overflight clearance in time" from Austria?

Please see the Federal Government's answer to question 25 in Bundestag printed paper 18/5538.

d) If the Federal Government does not know the reasons for the denial of clearance by France and Austria, to what extent does it consider it helpful or irrelevant to know and examine the reasons why other governments or defence ministries have denied clearance, in order to identify potential risks?

Information is regularly shared in the framework of cooperation with other countries, provided that it is not classified at national level. Air safety is paramount when military flight operations are carried out.

21. Which European governments have, to the knowledge of the Federal Government, announced that they do not intend to issue clearance for Global Hawk overflights?

The Federal Government has no information on this matter.

a) What does the Federal Government know about alternative or fallback routes over other countries, including in the event that the Global Hawk has to leave Italian, French or German airspace in an emergency?

The Federal Government has no information on this matter.

b) To the knowledge of the Federal Government, why has the US not chosen the shortest route from Sigonella to the Baltic Sea, via Croatia, Hungary, Slovakia, the Czech Republic and Poland?

According to HQ USAFE, the current route was chosen because the countries to be overflown had already issued overflight clearance as part of NATO's Unified Vision trial in 2014.

22. Has the Federal Government now received written confirmation from the US government providing assurances that the surveillance and reconnaissance sensors on board will be deactivated while the drone flies over German territory?

The US has provided assurances that the reconnaissance sensors will be deactivated during the transit through German airspace. Compliance with this requirement has been confirmed in writing by the US.

a) When did the Federal Government receive this confirmation, or when is it expected to be received?

The Federal Government received the written confirmation on 26 October 2015.

b) From what point in time and from arrival in what airspace is the activation (or reactivation) of the surveillance technology on board the Global Hawk planned?

The Federal Government has no information on this matter.

23. By what means can the Federal Government monitor the procedures regarding flight guidance and the use or activation of the sensors in German airspace before, during and after the flights?

Observation of the flight path from the ground is part of the procedures laid down in the operating agreement referred to above. This will be carried out by the German air traffic control service, DFS.

The US has provided assurances that the reconnaissance sensors will be deactivated during the transit through German airspace. There is no reason to suppose that the US will not comply with the legal provisions that are in place.

a) In the talks or procedures on the issuance of overflight clearance, to what extent did the Federal Government press to be able to observe this by sending military personnel to the appropriate situation centres, and how did the US government react to this?

The possibility of sending a national observer to verify the restriction on the operation of the reconnaissance sensors over Germany was examined. The US agreed to this possibility. As, however, the written confirmation provided by the US was regarded as being sufficient, a national observer has not been sent.

b) What does the Federal Government know as regards which EU or NATO members are sending "national observers" to an Air Force base or mission control station for the Global Hawk's overflights from Sigonella to the Baltic Sea?

The Federal Government has no information on this matter.

24. What further measures is the Federal Government taking to support the European Reassurance Initiative, in order "to send a visible signal of commitment in and to Europe and to the transatlantic relationship" and thus demonstrate that it is a "reliable partner"?

As things currently stand, no further measures to support the European Reassurance Initiative are planned.

25. As things stand at present, when are the Global Hawks to be delivered and handed over to NATO, and have there been any changes compared to the Federal Government's answer in Bundestag printed paper 18/5538?

The Federal Government is not aware of any changes compared to its answer in Bundestag printed paper 18/5538.

a) To what extent, as things stand at present, is the first flight still to take place as planned in the spring of 2016 (please provide a more specific timeframe if known)?

Please see the answer to question 25.

b) To what extent, to the knowledge of the Federal Government, is the master schedule being adhered to, which provides for two-stage operational testing after the delivery and handover of the NATO drones and before regular flight operations begin?

Please see the answer to question 25.

26. What does the Federal Government know about current problems in the certification process for the NATO Alliance Ground Surveillance (AGS) drones?

Please see the Federal Government's answer to question 5 b) in Bundestag printed paper 18/5538.

a) What does the Federal Government know about the new schedule for the certification process for the NATO AGS drones?

Please see the Federal Government's answer to question 5 in Bundestag printed paper 18/5538.

b) To the knowledge of the Federal Government, what is the reason for the "delay of several months" announced by the Italian certification authority?

The Italian certification authority has stated that this delay is due to delays by the American prime contractor NGISSII¹ in providing relevant documentation for the certification.

c) To what extent is it still the case that "no negative effects as regards the issuance of type certification" are to be expected?

¹ Northrop Grumman ISS International Inc.

Please see the Federal Government's answer to question 5 a) in Bundestag printed paper 18/5538.

27. What does the Federal Government know regarding the question of in which NATO member countries the NATO AGS Global Hawk drones could receive a construction or technical certification and/or airworthiness certification, and what efforts are taking place to this end?

The NATO Alliance Ground Surveillance (AGS) aircraft are to receive an Italian airworthiness certification. Responsibility for the airworthiness certification therefore rests solely with Italy.

28. To the knowledge of the Federal Government, to what extent is it not merely "possible in principle" but actually planned for the data collected by the NATO Global Hawks, after its "transmission via data relay satellites and a wideband data link (line of sight) to the relevant NATO AGS ground stations" to be immediately transmitted via fibre-optic cables to other situation centres or control centres?

a) Which situation centres or control centres could, in the Federal Government's view, potentially be involved in this context (including those outside Germany)?

b) Which relay stations could or would have to be used for this, and what is their exact location?

Please see the Federal Government's answer to question 14 in Bundestag printed paper 18/5538.

In addition, both the ground stations and the aircraft in the NATO AGS system have communications equipment allowing them to send and receive data (including control data). Data can be transmitted by the ground stations, depending on the type of communication, both via satellite and via underground cables. The line-of-sight link between the aircraft and the ground stations always takes place via radio communication. It is planned for the beyond-line-of-sight data link between the individual elements of the NATO AGS to be implemented as a military communications network. This is to be achieved by leasing transmission capacity via the NATO Communications and Information Agency (NCIA), and so it is not a component of the NATO AGS. From a technical perspective, any form of data transmission via suitable media (e.g. satellites and/or relay stations to broadband cables) can be considered.

The only underground cable link set up especially for the NATO AGS will be at the headquarters of the NATO AGS forces at the Sigonella base, between the transmitting/receiving system and the mission centre.

29. How many German service personnel currently hold a valid type rating for controlling the US Global Hawk, Euro Hawk and Triton drones, and have there been any changes compared to the Federal Government's answer in Bundestag printed paper 18/5538?

Three service personnel currently hold a type rating for Global Hawk; one of them is also qualified as a type rating instructor for the system.

No German service personnel currently hold a type rating for the Euro Hawk system.

As no decision has yet been taken in favour of MQ-4C Triton, no German service personnel hold a type rating for it. There have been no changes compared to the answer given in Bundestag printed paper 18/5538.

30. Which “directorates-general responsible in the Federal Ministry of Defence” are currently involved in the decision on the next steps and the possible further use of the Euro Hawk Full Scale Demonstrator?

The following directorates-general responsible in the Federal Ministry of Defence are involved in the decision on the next steps and the possible further use of the Euro Hawk Full Scale Demonstrator (FSD): the Directorate-General for Equipment, Information Technology and In-Service Support, the Directorate-General for Forces Policy, the Directorate-General for Budget and Controlling, the Directorate-General for Strategy and Operations, and the Directorate-General for Planning.

31. Has the “agreement terminating the previous contractual relationship” with the contractors for the Euro Hawk Full Scale Demonstrator (Bundestag printed papers 18/2729 and 18/5538), which the Federal Government had expected to be reached by the “end of March 2015” before it was postponed indefinitely, now been reached, and if not, when is it to be reached?

Negotiations are currently taking place on the termination of the development contract and the two Contractor Logistic Support (CLS) contracts. An agreement with the contractors has been reached with regard to the two CLS contracts. As things currently stand, the agreement is expected to be officially concluded before the end of this year. An agreement in principle has also been reached for the termination of the development contract. The final details are still being clarified. The conclusion of the agreement is currently expected in the first quarter of 2016.

32. If a final agreement on the termination of the contract has not yet been reached, what reasons can the Federal Government give for this?

Please see the answer to question 31.

33. What is the current state of play regarding the “preliminary work” for further Euro Hawk flights, and when could these flights take place, as things currently stand (please provide a more precise timeframe than “the summer of 2016” if possible)?

As things currently stand – and subject to parliamentary approval being received at the end of 2016 – the resumption of test flight operations with the Euro Hawk FSD is planned from the first quarter of 2017, depending on weather conditions.

a) What necessary measures to obtain a new provisional flight certification were “identified, which would have to be taken before the issuance of a new provisional flight certification”?

In parallel with the positive review of the aircraft carried out in the first quarter of 2015, more than 30 individual measures and test points were identified in the dialogue between the contractor and the Bundeswehr Aviation Office which must be implemented and verified before the Bundeswehr Aviation Office can issue a new provisional flight certification for the resumption of the Euro Hawk FSD test flights. They include the approval of the contractor as a maintenance organisation, necessary software and hardware changes, and updates to technical documentation and to risk and hazard assessments.

b) What was the content of an “industrial proposal containing, among other things, the necessary measures for the new issuance of a provisional flight certification”, and who was it submitted by (please also provide details of the financial considerations contained in it)?

In the current contractual negotiations between Euro Hawk GmbH and the public contracting authority, all necessary measures for obtaining a provisional flight certification are being included in full. The planned period for carrying out these measures is the second half of 2016. The financial negotiations are not yet complete. Parliamentary approval in mid-2016 is necessary before the contract is concluded.

c) What conclusions does the Federal Ministry of Defence draw from the authorities’ examination and evaluation of the proposal?

The authorities’ examination and evaluation of the proposal is not yet complete.

34. What information can the Federal Government provide about adherence to the schedule for a statement on the certifiability of the MQ-4C Triton drone, which was planned for the third quarter of 2015 and then postponed until February 2016 (Bundestag printed papers 18/3663 and 18/5538)?

The statement on the certifiability of the MQ-4C Triton is expected by November 2016. The large number of documents to be examined makes it necessary to draw on support, and the availability and delivery performance of this support have a significant influence on the schedule.

35. In what way has the US Navy supported the Bundeswehr to date through an “assessment of information” and what provisional conclusions does the Federal Government draw from this assessment?

The government contract (Foreign Military Sales Case) paves the way for support to be provided by the US Navy’s certification authority. Three expert discussions have now taken place to gather the necessary documents and information and to facilitate the US Navy’s support in assessing them. In addition, a procedure is being explored for the possibility of permanent cooperation on certification. No provisional conclusions are being drawn from this.

A decision will be taken on the next steps once a well-founded statement on certification is available.