

## Alliance Ground Surveillance (AGS)



NATO is acquiring the Alliance Ground Surveillance (AGS) system that will give commanders a comprehensive picture of the situation on the ground. NATO's operation to protect civilians in Libya in 2011 showed how important such a capability is. A group of Allies is acquiring five Global Hawk remotely piloted aircraft (RPA) and the associated command and control base stations that make up the AGS system. NATO will then operate and maintain them on behalf of all 28 Allies.

The AGS system is being acquired by 15 Allies (Bulgaria, Czech Republic, Denmark, Estonia, Germany, Italy, Latvia, Lithuania, Luxembourg, Norway, Poland, Romania, Slovakia, Slovenia and the United States), and will be made available to the Alliance in the 2017-2018 timeframe. All Allies will contribute to the development of the AGS capability through financial contributions covering the establishment of the AGS Main Operating Base, as well as to communications and life-cycle support of the AGS fleet. Some Allies will replace part of their financial contribution through 'contributions-in-kind' (national surveillance systems that will be made available to NATO).

The NATO-owned and operated AGS core capability will enable the Alliance to perform persistent surveillance over wide areas from high-altitude long-endurance (HALE) aircraft, operating at considerable stand-off distances and in any weather or light condition. Using advanced radar sensors, these systems will continuously detect and track moving objects throughout observed areas and will provide radar imagery of areas of interest and stationary objects.

The main operating base for AGS will be located at Sigonella Air Base in Italy, which will serve a dual purpose as a NATO Joint Intelligence, Surveillance & Reconnaissance (JISR) deployment base and data exploitation and training centre.

Just as NATO Airborne Early Warning & Control (NAEW&C) aircraft – also known as AWACS – monitor Alliance airspace, AGS will be able to observe what is happening on the earth's surface, providing situational awareness before, during and, if needed, after NATO operations.

### Components

The AGS Core will be an integrated system consisting of an air segment, a ground segment and a support segment.

The air segment consists of five RQ-4B Global Hawk Block 40 aircraft. The aircraft will be equipped with a state-of-the-art, multi-platform radar technology insertion program (MP-RTIP) ground surveillance radar sensor, as well as an extensive suite of line-of-sight and beyond-line-of-sight, long-range, wideband data links. The air segment will also contain the remotely piloted aircraft (RPA) flight control stations.

The ground segment will provide an interface between the AGS Core system and a wide range of command, control, intelligence, surveillance and reconnaissance (C2ISR) systems to interconnect with and provide data to multiple deployed and non-deployed operational users, including reach-back facilities remote from the surveillance area.

The ground segment component will consist of a number of ground stations in various configurations, such as mobile and transportable, which will provide data-link connectivity, data-processing and exploitation capabilities and interfaces for interoperability with command, control, intelligence, surveillance and reconnaissance (C2ISR) systems.

The AGS Core support segment will include dedicated mission support facilities at the AGS main operating base (MOB) in Sigonella, Italy.

Contributions-in-kind provided by France and the United Kingdom will complement the AGS with additional surveillance systems.

The composition of the AGS Core system and these contributions-in-kind will provide NATO with considerable flexibility in employing its ground surveillance capabilities.

This will be supplemented by additional interoperable national airborne surveillance systems from NATO nations, tailored to the needs of a specific operation or mission conducted by the Alliance.

## Mechanisms

The NATO Alliance Ground Surveillance Management Organization (NAGSMO) is responsible for the acquisition of the AGS core capability on behalf of the 15 participating nations. The AGS Implementation Office (AGS IO) at the Headquarters of Allied Command Operations (SHAPE) is responsible for ensuring the successful operational integration and employment of the NATO AGS core capability.

The NATO Alliance Ground Surveillance Management Agency (NAGSMA), representing the 15 AGS acquisition nations, awarded the prime contract for the system to Northrop Grumman in May 2012 during the Chicago Summit. Northrop Grumman has begun the production of the first AGS aircraft. The company's primary industrial team includes Airbus Defence and Space (Germany), Selex ES (Italy) and Kongsberg (Norway), as well as leading defence companies from all participating nations. The industries of all 15 participating nations are contributing to the delivery of the AGS system.

The engagement of NATO common funds for infrastructure, communications, operation and support will follow normal funding authorisation procedures applicable within the Alliance.

By the time AGS becomes fully operational in 2018, France and the United Kingdom will sign a Memorandum of Understanding (MOU) with the Supreme Allied Commander Europe (SACEUR), outlining the modalities for making their contributions-in-kind available to the Alliance.

## Supporting NATO's core tasks

The Lisbon Summit set out the vision of Allied heads of state and government for the evolution of NATO and the security of its member nations. This vision is based on three essential core tasks, which are detailed in the new Strategic Concept:

- collective defence
- crisis management
- cooperative security

AGS was recognised at Lisbon as a critical capability for the Alliance and is planned to be a major contributor to NATO's Joint Intelligence, Surveillance & Reconnaissance (JISR) ambition.

AGS will contribute to these three core tasks through using its MP-RTIP radar sensor to collect information that will provide political and military decision makers with a comprehensive picture of the situation on the ground.

## Facts and Figures

General characteristics of the RQ-4B Global Hawk Block 40 Remotely Piloted Aircraft:

- Primary function: High-altitude, long-endurance intelligence, surveillance and reconnaissance
- Power Plant: Rolls Royce-North American AE 3007H turbofan
- Thrust: 7,600 lbs
- Wingspan: 130.9 ft / 39.8 m
- Length: 47.6 ft / 14.5 m
- Height: 15.3 ft / 4.7 m
- Weight: 14,950 lbs / 6,781 kg
- Maximum takeoff weight: 32,250 lbs / 14,628 kg
- Fuel Capacity: 17,300 lbs / 7,847 kg
- Payload: 3,000 lbs / 1,360 kg
- Speed: 310 knots / 357 mph / 575 kph
- Range: 8,700 nautical miles / 10,112 miles / 16,113 km
- Ceiling: 60,000 ft / 18,288 m



NAGSMA Executive Office  
NATO HQ - Building ZA  
Bd. Leopold III  
1110 Brussels

Tel.: +32 2 707 1801  
eMail: [nagsma@nagsma.nato.int](mailto:nagsma@nagsma.nato.int)

Fax: +32 2 707 1862