

nationwide networks for public safety forces (of which 13 are in Europe) and more than 30 networks for local authorities and defence forces.

When security threats arise at large events or gatherings of people, the Company offers real-time secure data and surveillance, cyber security, secure connectivity and situational awareness.

### Critical Infrastructure Protection

The Company protects government installations, air bases and military sites, ports and airports, sensitive industrial sites and civil infrastructure. The focus of our critical infrastructure portfolio is to provide operators of protected facilities with situational awareness of that site, as well as with actionable intelligence and command and control systems that enable them to respond to threats and manage incidents when they do occur. For example, Airbus communications solutions help to secure over 100 metro lines, 20 airports and 11,000 km of pipelines.

### Secure Connectivity for Transportation

With the growth of large urban areas around the world, efficient but safe transportation is vital. The Company provides some of the busiest airports, train stations and underground train systems in Europe and China with its Tetra system, a secure radio communication network, allowing hundreds of users to securely communicate in real time. These operators rely on Airbus' secure communications to relay urgent and confidential messages in emergency situations.

### Cyberspace Protection

Airbus CyberSecurity's Orion Malware solutions provide businesses with the ability to detect malware in their networks and investigate emerging threats. In the past when the French TV channel (TV5 Monde) suffered an unprecedented cyber-attack, taking the station offline, Airbus CyberSecurity provided a fast and satisfactory resolution of this crisis.

### Defence and Security

The Company works with the EU, NATO and other governments to supply the necessary equipment to support their efforts to make the world a safer place. Nations need defence systems and equipment to guarantee sovereignty, security and human rights. The Company's military aircraft, satellites and security technologies help protect democratic values around the globe. A partnership with the Company also helps them to protect their nations from the changing nature of terrorism threats and cybercrime.

Airbus Defence and Space does not produce nuclear weapons. Through its 50% share in ArianeGroup, there is a connection to the French Nuclear Deterrence Programme as ArianeGroup produces the M-51 launcher. However, the warhead is exclusively built by France's Directorate General of Armaments (DGA).

## b) Products for a Healthier Environment

The Company has been a trusted provider of governmental space capability since the birth of European space 50 years ago, delivering satellites as well as data solutions that inform decision making on significant environmental issues. Its aerial imagery of climatic and environmental changes around the planet reveal the scale of change and dependencies at work, deepening understanding of Earth's systems and enabling smarter responses.

## Earth Monitoring

Copernicus, the EU's Earth Observation programme, is the biggest provider of Earth observation data in the world. Its images are vital to managing the health of our planet. The Company contributes to all the Copernicus Sentinel satellites and its SpaceDataHighway, a near-real time laser communication relay, is used to transmit data from the Sentinel-1 and -2 satellites. Airbus satellites include:

- Sentinel-2, which circles the Earth's landmasses every ten days, delivering data for agriculture, forestry, natural disaster monitoring and humanitarian relief efforts;
- Sentinel-5 Precursor, which provides critical insights in helping to understand and mitigate the effects of climate change.

Other Airbus satellites in orbit include:

- ADM-Aeolus provides global observations of atmospheric modelling and analysis techniques, which are used in weather forecasting and climate research;
- the MetOp satellites. Since their launch, errors in one-day weather forecasting have been reduced by 27%. The MetOp mission provides meteorological observations from polar orbit and contributes to long-term climate monitoring;
- Twin Grace-FO satellites are mapping the Earth's gravitational field to better understand movement of water, ice and land masses.

## Agriculture

Satellite and drone imagery integrated with Airbus digital platforms enable agricultural stakeholders to understand and monitor crop growth. Platform solutions include:

- Verde helps farmers optimise crop scouting, irrigation, seeding, fertilisation, and crop detection, to improve practices over the long run to get more out of fields in a sustainable way;
- Farmstar supports French farmers to improve their harvest quality with plot-specific accuracy, offering a complete range of information on the condition of crops (stand counts, nutritional condition, risk of disease, etc.) in order to rationalise fertiliser input and safeguard the environment;
- AgNeo provides agribusinesses with an innovative and reliable decision support platform to drive greater efficiency. It provides in-season actionable information utilising imagery, field data and weather insights.

## Forest Management

Airbus' Starling is a private and independent tool that allows companies to monitor the implementation of their "No Deforestation" policies by tracking land cover change over time. Nestlé is using the Starling system to monitor its entire palm oil supply chain. Starling helps Nestlé understand better where deforestation occurs, what drives it and who is involved.

## Sustainable Space

The Company is working to ensure a sustainable space environment to prevent space debris and protect valuable national assets, such as satellites in orbit around the globe. For example:

- Airbus is the first company to test technologies to clear out space junk and avoid spacecraft collisions. Three main debris removal technologies have been tested in orbit: harpoon, net and vision-based navigation. In addition, active debris capture using robotic arms is being developed on the Airbus site in Stevenage;