## What the space sector can do for Africa – and how Africa can contribute to the space sector

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at the

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Dear Ambassador, dear Minister, dear Dr. Le Gall, dear Prof. Battiston, dear Prof. Wörner, dear Dr. Di Pippo, dear Dr. Munsami, dear Heads of Delegations, Ladies and gentlemen, it is a pleasure to be here part of this "Second International Space Forum at Ministerial Level focusing on Space Science and Academia for sustainable development in Africa". I welcome the initiative to have this IAF Event in Africa to discuss "Space Science and Academia for Sustainable Development in Africa".

The space sector is in transition. It has evolved from activities of few countries with mainly science and technology motives to a sector allowing direct socio-economic benefits for the involved countries. With the on-going internationalisation and globalisation of the space sector with new institutional and private actors emerging across all continents, today you do not need to master the whole chain of space activities to be able to reap the benefit of space.

This is a chance for Africa since space is definitely part of the answer to challenges we are facing on all continent. We all agree around this table that Space technology and its applications can contribute to solve societal challenges like food security; sustainable agriculture and forestry; clean and efficient energy; smart, green and integrated transport; climate change and its consequences – just to name a few. By tackling those and other challenges Space can create a considerable positive socio-economic benefit for Africa and help achieving the United Nations Sustainable Developments Goals.

I want here to highlight a few examples of current activities of German actors to provide solutions to the African continent.

Satellite Communication for example provides connectivity for remote areas where landlines cannot be laid down. Without such space-based solutions those regions would have a hard time attracting commercial enterprises and industry. We already see a lot going on in this area. For example last month CETel, a German service provider of end-to-

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end communications solutions, has signed a contract with SES Networks to connect exploration and production sites in Africa via medium earth orbit.

In the field of Earth observation, the German company EOMAP, which was founded in 2006 as a spin-off from the DLR Remote Sensing Technology Institute, on 22 January 2018 published a new online portal with global comprehensive water quality data. With such data now for the first government institutions, environmental authorities, the water industry will be able to take better-informed decisions with regard to sustainable water management – a challenge for many African countries.

But our efforts to make use of Space to exploit Space benefits for Africa's socio-economic Development would come off too short by just exporting German, European or international solutions to African countries. We will only start harvesting the full potential of Space if the African actors like universities, academia, companies and Space Agencies are involved in developing and building such solutions tailored specifically for African needs.

Africa is already a player in space and you have space actors from the North to the South, and from West to the East. The ecosystem is there to further develop space.

The framework and instruments to make this concept of greater involvement a reality are also at hand and I would like to refer to just a few: As it was already mentioned on the political level on 31 January 2016 in Addis Ababa the African Union adopted the African Space Policy and African Space Strategy, in which it is laid down how Space can contribute to social, political and economic integration. One of the core principles of the Strategy is the "Development of indigenous capacity to operate and maintain core space capabilities" and one of the strategic actions defined is "Promoting international cooperation". In other words: Make African Space actors part of the global network of space players.

The creation of an African Space Agency, as currently discussed, would be an important step in this direction.

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Another significant approach by the African Union is the Pan African University with research institutes located in different countries and focused on multiple areas like agriculture, water and energy management, space science, or technology like here in Kenya. This concept not only creates know-how through research but is also a means of building up of capacities. Capacity building, an area in which Germany is also contributing across the continent in many space fields, is another important factor for a successful involvement of African actors into the global Space community.

At national level, Germany is aiming at supporting the building up of the African economy and industry, for example through the Pro!Afrika initiative, aiming on areas like digitalization or water management driven by the German Ministry for Economics and Energy. This approach was also reflected in the German concept presented during its G20 presidency in 2016/2017 and resulted in the Compact with Africa initiative (CWA). Also Germany's private sector is pushing towards more intense cooperation with Africa through its North Africa Middle East Initiative (NMI),

European programmes like the ESA TIGER programme or the "GMES and Africa" initiative offer a cooperation framework for Earth observation-based services that support sustainable development in Africa. "GMES and Africa" is coordinated by the African Union Commission and supported by international partners.

For example the German company GAF AG was recently awarded a service contract for this programme by the European Commission and is now providing support to the African Union.

Besides public efforts there are also first initiatives driven by the commercial sector, like the Airbus BizLab. In summer 2017 the Airbus BizLab, a global business accelerator, scouted aerospace start-ups from East and Southern Africa to trigger Entrepreneurship in the field of Space. The focus was on UAVs, satellite operations and Imagery, 3D printing, smart sensors and Artificial Intelligence.

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The German space industry is also willing to cooperate with local actors to implement solutions for the whole space supply chain from up-stream, to mid and downstream.

There are many more instruments and opportunities to strengthen ties between Africa and the rest of the global Space landscape and we should make use of them, because only by integrating universities, academia, companies and Space Agencies in Africa into the global network of Space players we will unleash the potential of African countries.

Germany welcomes the adoption of the Africa page that will be added to the Trento 2016 International Space Statement and, even more important, the efforts of making African space players part of the global space community! The German space sector is willing to contribute to the development of the continent and help implementing specific solutions that will provide socio-economic benefits here in Africa.

Thank you for your attention.