

## Space Solutions for Resilience in the Mediterranean

27 June 2017, Kalkara, Malta

Opening Session of First Day:  
**Enhanced Space Solutions for Emerging Policy Challenges (v0)**

*Josef Aschbacher, ESA,  
Director of Earth Observation Programmes*

Dear Mr Minister, Dear Mr Parliamentary Secretary, Dear Mr Chairman, Distinguished Guests, Ladies and Gentlemen,

I am **very honoured and pleased** to be part of this opening panel. The purpose of this conference, co-organised by the Maltese presidency of the Council of the EU and the EC, is to address specific policy priorities and to review how space solutions can contribute to such priorities.

It is important to **bring all the stakeholders together**, since the challenges we are facing can only be tackled through cooperation. The conference venue is also very symbolic, as the **Mediterranean region is a paradigm example of evolving policy needs and priorities**. Moreover, it allows for a worthy conclusion of an **extremely successful and impressive Maltese Presidency** of the Council of the European Union.

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What can space based EO offer with regard to Emerging Policy Challenges?

With **Copernicus** we – together with the EU – are deploying a **unique Earth observation system** to monitor, understand and the environment, and to keep our planet safe and secure.

Copernicus has become a **tangible reality**, with 5 Sentinels in orbit and more to follow soon. More than 84.000 registered users. More than 27 PB downloaded. Six thematic **services up and running**, each one addressing relevant policy domains.

Our world is changing and **new challenges** are emerging:

- climate change
- water scarcity
- food security
- population growth
- migration
- ....

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These challenges are **interlinked** and cannot be addressed in an isolated way.

With the current systems we can already offer a lot to **support development policies and address root causes of migration**. Just to give you some examples: Our Sentinel satellites

- help to monitor the growth status of rice plants and the extent of available agricultural areas;
- they contribute to forest monitoring within international initiatives like GFOI;
- and they help to assess the state of the oceans, detecting algal blooms that can impact fishery.

As a next step we also need to consider **emerging policy needs** that would require **new observation capabilities**:

- climate change
- maritime security
- ...

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The **Copernicus Evolution** is a natural opportunity to embark on these kind of capabilities. Current review under the **leadership of the EU** (who among other things is in charge of gathering the user requirements). Needs to be a **user driven process** – which is one of the reasons why we are here today!

Let me conclude by reminding you that space based Earth observation is faced with **rapidly changing boundary conditions**. For example, we are exposed to (but also actively influencing!) **massive evolutions in information technology**. I think the new political priorities we are discussing, the exponential growth of data volumes and the new ways of collecting information (e.g. combination with on ground data) should lead us to take advantage of trends like **big data** analytics.

This is also an opportunity, the more so since we have **new actors** in the field of Earth observation – usual players like space agencies and established industries are complemented by **private and commercial entities**, often from **outside the traditional space**

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**domain.** But new public players like **International Financial Institutions** enter the picture as well.

**Value adding** is of particular economic relevance, given that our Earth observation data are offered in a free and open manner – a **prime opportunity for innovative approaches and start ups**. This is why I am particularly glad that ESA's Business Incubation Centre **(BIC) initiative** offers young entrepreneurs the chance to make the most of their ideas, **turning raw data into useful and actionable information** needed by the end users.

I am looking forward to fruitful discussions and exchanges during this conference, and I am confident that we will find a common way of shaping a **sustainable future** for the Mediterranean region, Europe and our planet as a whole.

Thank you.