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ISF 2019 - Israel's Statement

Israel is a small country.

Nevertheless, we decided to be independent in our space capabilities and have built and launched over 30 satellites since the first launch in 1998.

Approximately half of them have a civilian mission, for the sake of scientific research, economy, society etc.

We welcome any cooperation in space activity, especially in the context of Mediterranean countries, and especially in earth related scientific research.

Let me brief you shortly about our main activities in those areas.

First, let me mention that Israel has joined the Initiative of the Space Climate Observatory and signed on the agreement at Le Bourget in June 2019.

We are currently involved in some projects related to space and environment.

For example, the Venus satellite, which is a cooperative scientific earth observation mission between ISA and CNES, is already in orbit delivering images with high resolution, excellent photometric quality in 12 spectral bands and 2 days revisit time to 125 sites around the globe. Based on those images, precise agriculture, water quality, seashore preservation, and urban studies are being conducted by researchers from all over the world.

ISA and CNES are aiming to start additional cooperative missions for environmental research. In that context, we plan to use a Cluster of satellites for studying Cloud Evolution and Lightning imaging.

The SHALOM mission between Israel and Italy, which is a highly advanced hyperspectral earth observation mission with 250 spectral bands, is now completing phase B1 and is planned to start full scale development shortly.

Israel is also involved in cooperation regarding Basic Science. For example, the Israeli Space Agency is studying jointly with the Italian Space Agency, ASI, the effects of microgravity on various chemical, physical, biochemical and biological processes such as DNA transfer in bacteria, enzymatic reaction kinetics and more. These experiments will be launched this October on a nanosatellite manufactured by the Israeli company Space Pharma, enabling autonomous micro-gravity experiments in space.



ISA, NASA, and DLR collaborates to explore a radiation protection vest for astronauts (for long duration missions), developed in Israel. It will be launched shortly to ISS - the International Space Station, followed by a radiation protection experiments.

Israel has also initiated a new astrophysics mission, which we hope, will revolutionize our understanding of the hot transient universe and will have a broad scientific impact across the fields of Gravitational Wave sources, supernovae, variable and flare stars. This initiative is a joint international effort.

Finally, yet very important, let me talk about education, Particularly regarding STEM education. Israel already embarked on educational outreach programs, giving young high-school students the opportunity to develop, manufacture and deploy eight new nano-satellites (another two are already in orbit). They will be launched sometime during 2020.

ISA and CNES are planning jointly to execute educational program for high school kids, in a Mars Analogue Base that will take place in Israel on 2020.

Let me repeat what I've started with: **We welcome any cooperation and collaboration in space activity.**

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Chairman, Israel Space Agency