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**CURRENT ACTIVITIES OF YUZHNOYE STATE DESIGN OFFICE ON
PLANETARY DEFENSE**

Mykhailo Kaliapin⁽¹⁾, Gennadiy Osinovy⁽²⁾
*⁽¹⁾⁽²⁾ M. K. Yangel Yuzhnoye State Design Office,
3, Kryvorizka Street, Dniepropetrovsk city, Ukraine, 49008,*

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ABSTRACT

Since the Near-Earth Object (NEO) threat is a serious risk factor for our civilization, development of measures for its prevention has to become one of the most important problems that humans have to solve in the 21st century. The evidence that it can actually be solved is that, in its time, the leading technologically developed countries created almost all basic components of the Planetary Defense System (PDS) – space-rocket hardware, kinetic and nuclear weapons, communication and control facilities, navigation systems, etc.

Yuzhnoye State Design Office takes part in the international cooperation on planetary defense; in particular, it is an active member of the newly formed Space Mission Planning Advisory Group (SMPAG).

Yuzhnoye State Design Office is currently working on a number of potential reference missions addressing a hazardous NEO, and deflection or disruption possibilities. These reference missions will facilitate realistic technical and resource planning.

To prevent an approaching threat, it is essential that all key links of the international Planetary Defense System have been formed and are functional.

Basically, we are trying to see what those key links are, what has to be done for them to function flawlessly, and what the Yuzhnoye SDO with its wide expertise in the space sector can contribute for the good of the world.