

UAE Capacity Building and International Collaborations via Space Projects



UAE National Space Strategy

وكالة الإمارات للفضاء
UAE SPACE AGENCY



1) To provide competitive and world-leading space services



2) Develop local advanced capabilities in research, development and manufacturing of space technology



3) Launch inspiring scientific and exploration space missions



4) To build experience and a national culture and in space



5) Promote effective local and global partnerships and investments in the industry

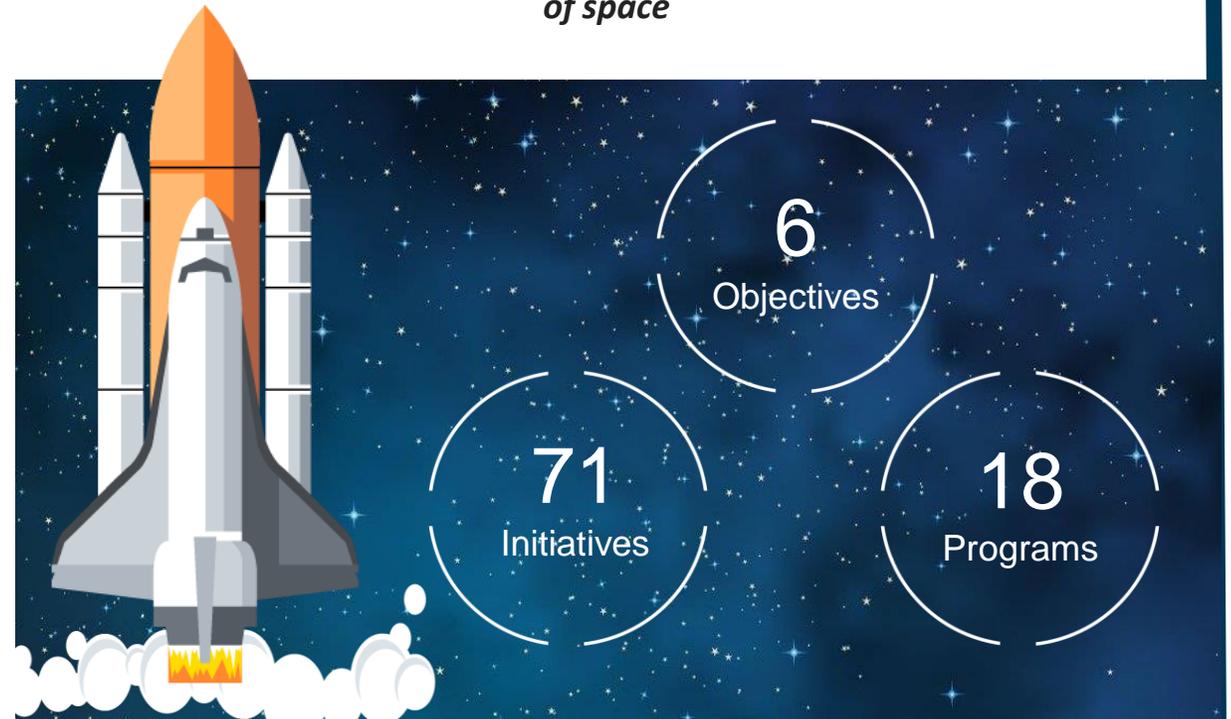


6) Ensure a supportive and legislative infrastructure that keeps pace with the future developments of the industry



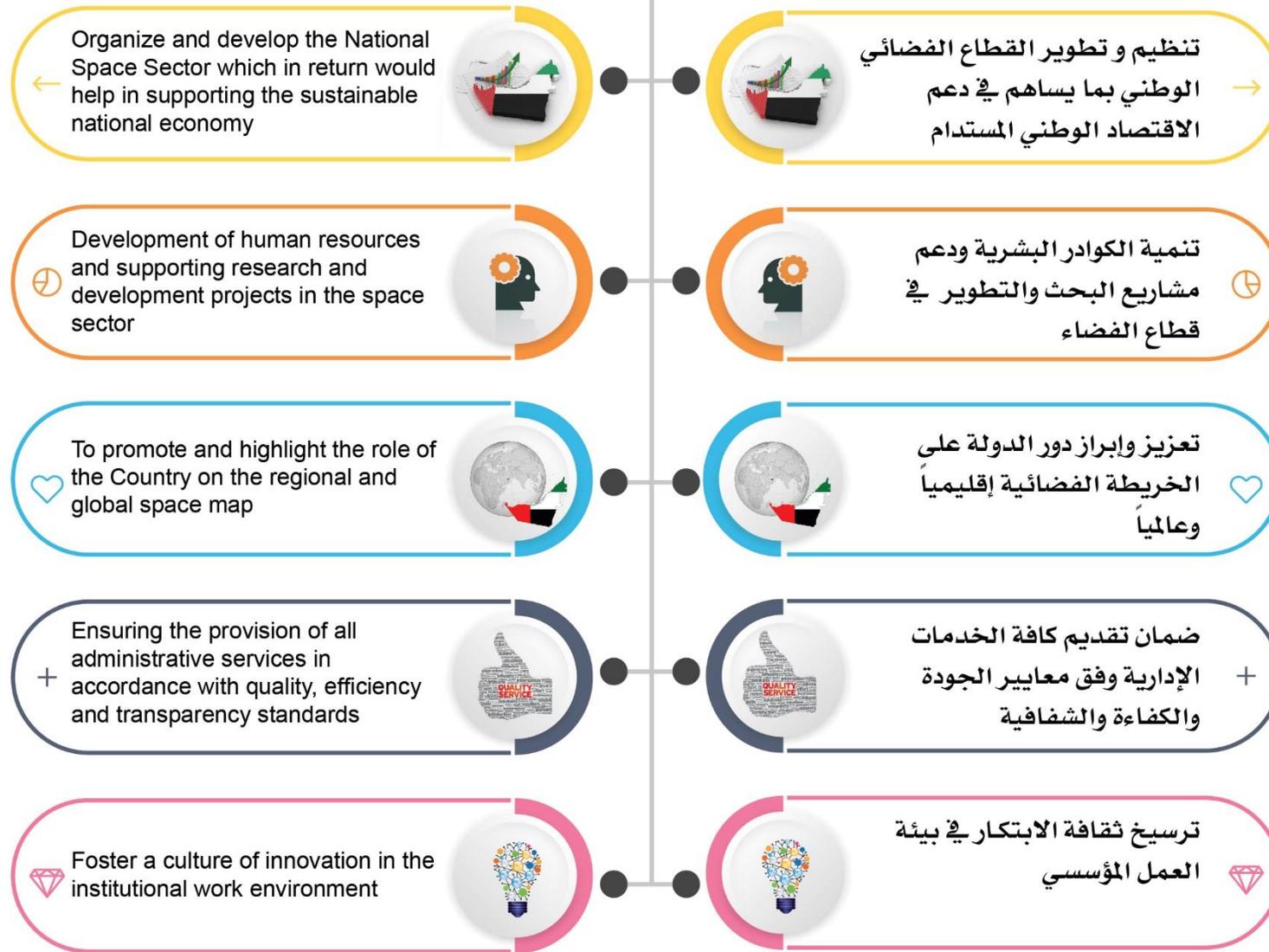
Vision

The UAE to be among the leading and most advanced countries in the field of space



UAE Space Agency Strategic Objectives

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UAE SPACE AGENCY



The ST&I areas have been categorized into three groups to guide R&D efforts and the allocation of funding for maximum benefit

Group 1

ST&I Areas relevant to national indigenous capabilities build up and short term requirements.

 1.0 Launch Propulsion Systems	 5.0 Communications, Navigation, and Debris Tracking	 12.0 Materials, Structures, Mechanical Systems, and Manufacturing
 2.0 In-Space Propulsion Technologies	 8.0 Science Instruments, Observatories & Sensor Systems	 15.0 Software and Applications
 3.0 Space Power and Energy Storage	 10.0 Nanotechnology	 17.0 Satellite Technologies and Techniques
 4.0 Robotics and Autonomous Systems	 11.0 Modeling, Simulation, IT & Processing	

Group 2

ST&I Areas relevant to Extending Human in Space and long term requirements

 6.0 Human Health, Life Support, and Habitation Systems
 7.0 Human Exploration Destination Systems
 16.0 Life and Physical Sciences
 9.0 Space Entry, Descent, and Landing

Group 3

ST&I Areas have less immediate requirements

 13.0 Ground and Launch Systems Processing
 14.0 Thermal Management Systems
 18.0 Ground Station Systems and Networks



Knowledge Management and Space Centres

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UAE SPACE AGENCY



مركز محمد بن راشد
للفضاء
MOHAMMED BIN RASHID SPACE CENTRE



UAEU المركز الوطني لعلوم وتكنولوجيا الفضاء
National Space Science and Technology Center



جامعة خليفة
Khalifa University

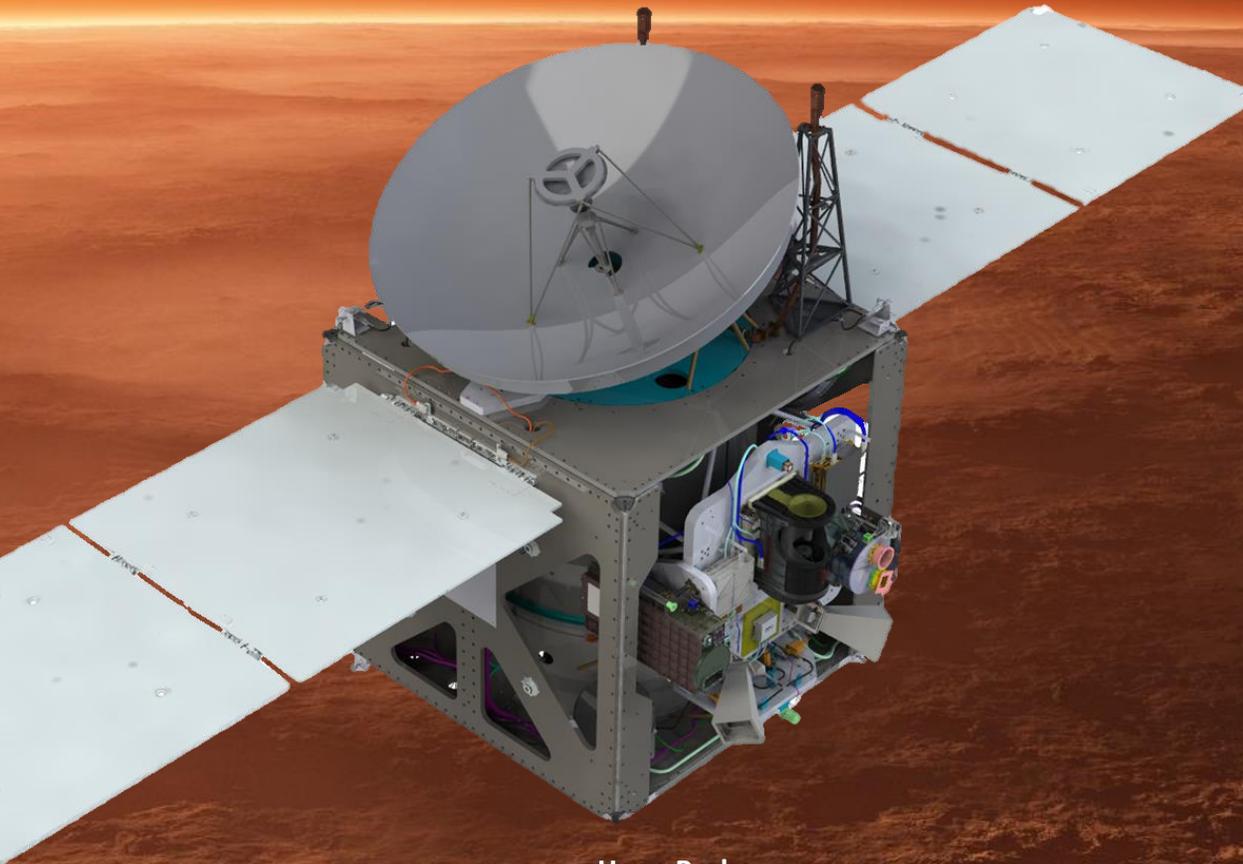



SAIST



National Capacity Building

Deep Space Mission

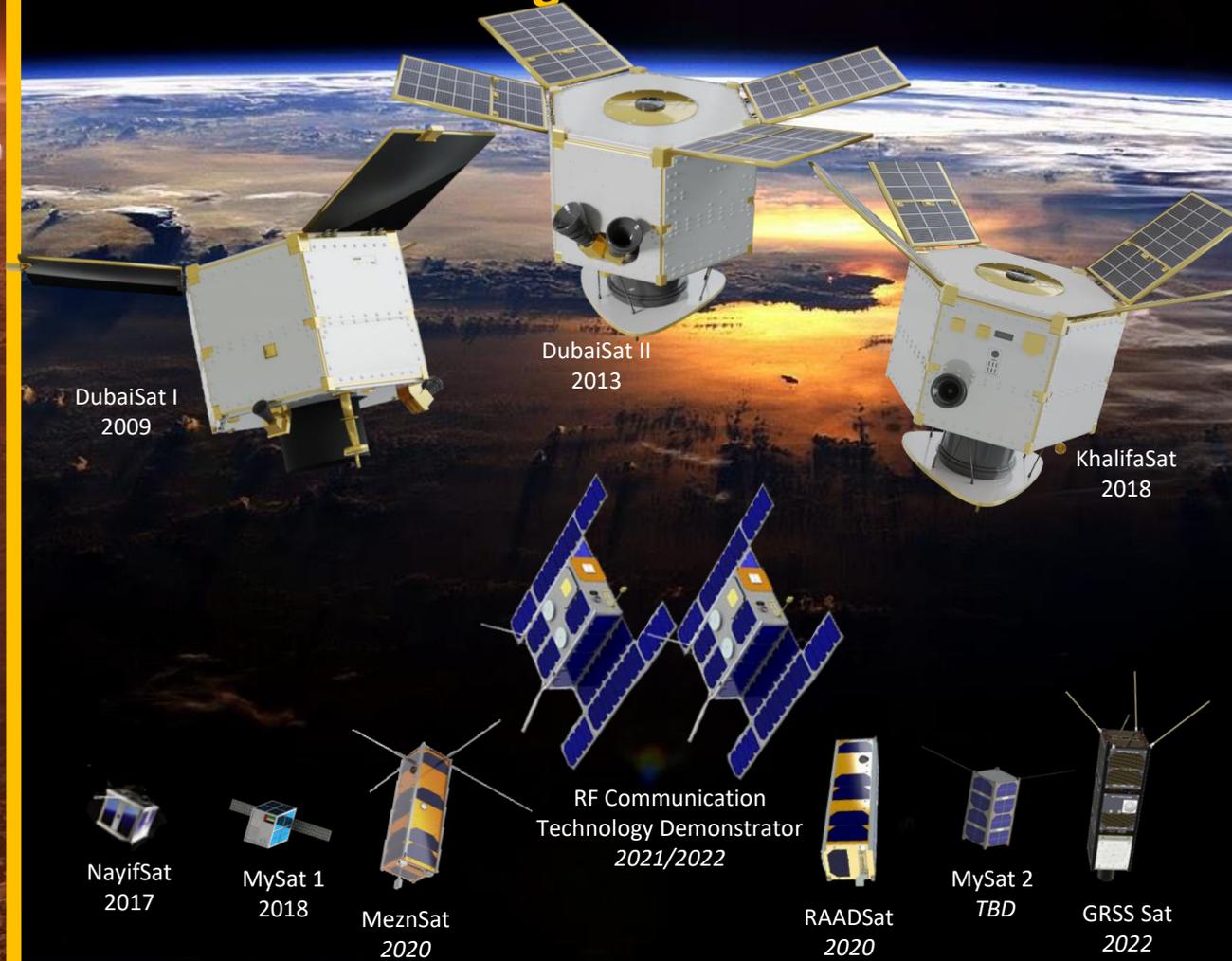


Hope Probe
2020

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Scientific / RF Communication / Remote Sensing LEO Missions



DubaiSat I
2009

DubaiSat II
2013

KhalifaSat
2018

NayifSat
2017

MySat 1
2018

MeznSat
2020

RF Communication
Technology Demonstrator
2021/2022

RAADSat
2020

MySat 2
TBD

GRSS Sat
2022

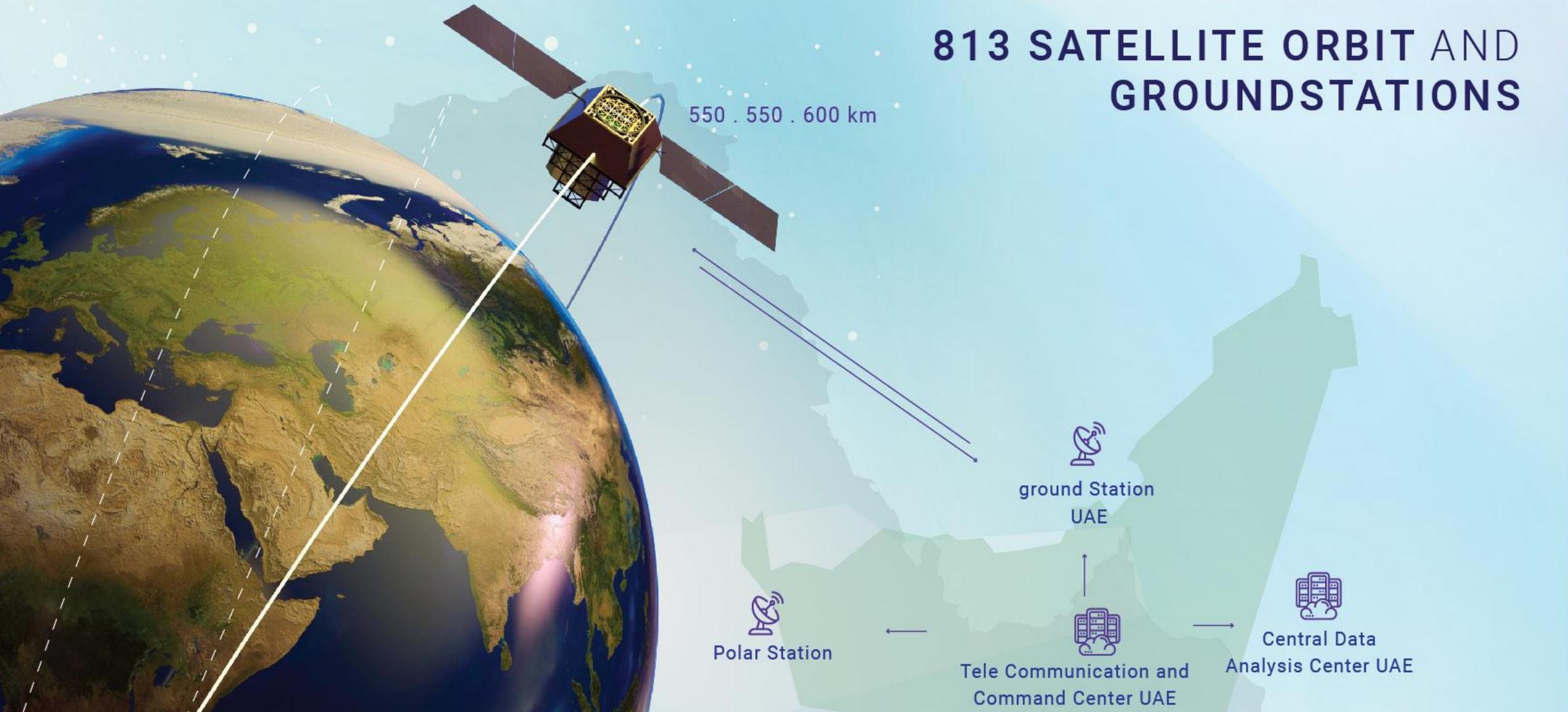
Arab Space Cooperation Group

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UAE SPACE AGENCY



March 2019, during the Global Space Congress in Abu Dhabi, His Highness Sheikh Mohamed bin Rashid Al Maktoum announced the Arab Space Cooperation Group of 11 Arab countries and announced the Satellite project “813”

813 SATELLITE ORBIT AND GROUNDSTATIONS



- Capacity building and international collaborations are commitments embraced at the national strategic level.
- Capacity building activities can be increased through increased funding of space research and development projects.
- Space projects are great means of enabling capacity building and international collaborations.

