وكالة الإمارات للفضاء UAE SPACE AGENCY



UAE's Efforts on space as an arena for Innovation, integration, and Investment

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- Development of STI roadmap
- **Research Centers**
- Establishment of the national Emirates Space Innovation Group ESIG
- Establishment of laws and regulations supporting intellectual property right and free data access
- Facilitate engagements between space industry and non-space industries
- Raise awareness about opportunities in space technologies and applications
- Developing space investment Strategy
- Studying the establishment of a space business zone
- Advancement of international cooperation in Space ٠

Science, Technology & Innovation Roadmap





18 key technology areas for R&D

...resulting in the inclusion of 18 ST&I areas that address the current and future needs of the space industry

UAESA developed the UAE ST&I roadmap, representing the areas for R&D development in a more detailed and *bottom-up* approach, which takes into account the UAE capabilities as well as international trends.

	6.0 Life Support, and Habitation Systems	11.0 Modeling, Simulation, IT & Processing	16.0 Life and Physical Sciences		18.1	Ground Station Systems
2.0 In-Space Propulsion Technologies	7.0 Human Exploration Destination Systems	12.0 Materials, Structures, Mechanical Systems, and Manufacturing	17.0 Satellite Technologies and Techniques		18.2	Communication Networks
4 3.0 Space Power and Energy Storage	■ 8.0 Science Instruments, Observatories & Sensor Systems	13.0 Launch Systems Processing	18.0 Ground Station Systems and Networks		18.2.1	Advanced Ground Communication Networking Concepts
4.0 Robotics and Autonomous Systems	9.0 Entry, Descent, and Landing	- 14.0 Thermal Management Systems			18.2.2	Communication Network Technologies and Protocols
5.0 Communications, Navigation, and Debris Tracking	10.0 Nanotechnology	15.0 Software and Applications				
ST & Dreakdown Structure						

ST&I Breakdown Structure -

Each ST&I area is broken down into three levels of granularity including area, component and sub-component

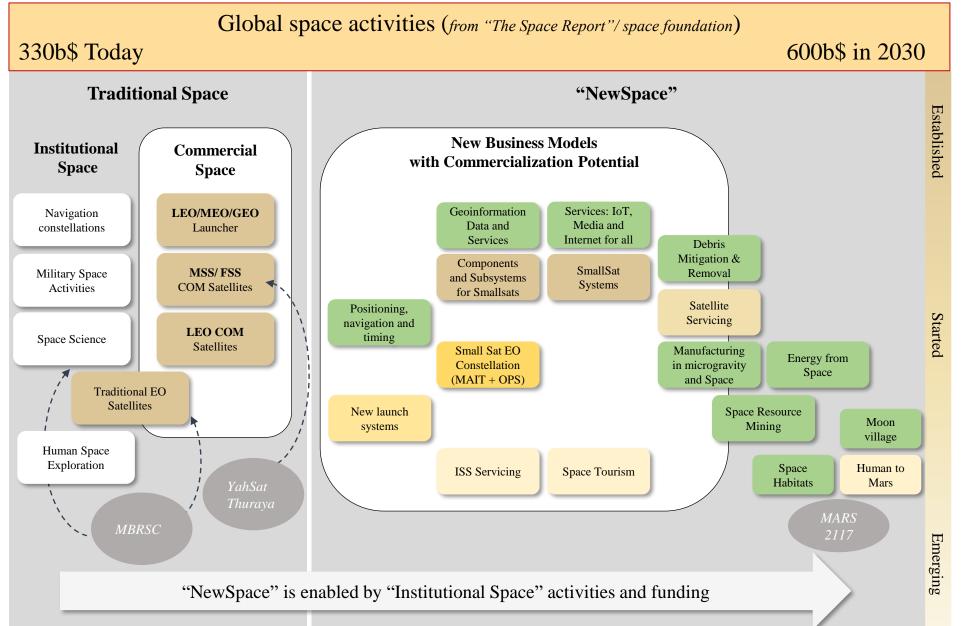
• The UAE Space ST&I Tree includes 18 areas, 83 components, and 422 sub-components

Selection of New Space areas





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- Countries to share their experiences and lessons learned about how they promote space investment, integrations, and innovations.
- Encouragement of having regulations that attract space investments and innovations (for example: data free access, IPRs, export control).
- Support more participations in UNOOSA by private and academic actors.
- organize platform where space and non space industries exchange views and about needs and potential opportunities.
- Continue the Advancement of cooperation and collaboration in the field of space