



Commercial | Government | Scientific
Empowering Space Missions with
Expeditionary Mobile Medical
Teams & Reachback Support

WORLDWIDE REACH. HUMAN TOUCH.

OVERVIEW

International SOS is a leading provider of expeditionary and remote medical services with a global footprint and additional expertise in the aerospace, private aviation and maritime industries through our wholly-owned subsidiary, MedAire. We support manned and unmanned space missions. From ground-based critical mission launch activities, to in-flight operations and recovery missions. Our goal is to help organisations, including government and private companies, conduct space missions with health and safety at the cornerstone of every phase. We help Space Industry organisations avoid costly disruptions to their missions.

OUR APPROACH

We understand the unique needs of our clients and the risks and pain points associated with space missions. We provide the full range of medical services, including health consulting, 24/7 assistance, medical staff and health support, and aeromedical and security evacuations from austere launch and recovery sites. Our medical teams are highly trained to identify and stabilise situations requiring immediate medical attention and provide routine primary care whether at a launch site, sub-orbital and orbital flight or upon return to Earth.

AVOID COSTLY DISRUPTIONS TO YOUR SPACE MISSION

By partnering with a leading international medical services provider specialised in your unique operating environment, you will gain peace of mind and reduce the likelihood of costly delays to your mission. We understand the context:

- Remote or unfamiliar nature of remote launch locations and facilities, combined with a lack of localised medical infrastructure and emergency response capabilities
- Health and safety factors that astronauts are exposed to during space travel, including chronic health conditions that may be exacerbated during travel
- Impact of medical emergencies on a mission's operational success and the impact of disruption to everyone involved
- Reputational harm resulting from mission disruptions, fatalities or catastrophic events

HEALTH ISSUES TO EXPECT

As space launches and recovery missions take place in remote locations with unique environmental conditions, the potential for medical emergencies is a genuine risk. These incidents range from mere inconveniences to life-threatening situations, making swift medical intervention critical to prevent severe, mission-halting events.

COMMON MEDICAL CASES ON A REMOTE SITE*



Underlying lifestyle diseases (hypertension, diabetes) leading to a medical emergency



Respiratory tract infections due to infectious disease (COVID-19, influenza)



Work-related site injuries or trauma (from working at height, moving objects)



Oral & dental emergencies (cavities, abscesses)

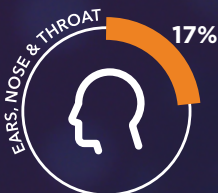


Mental health issues linked to nature of role or working environment

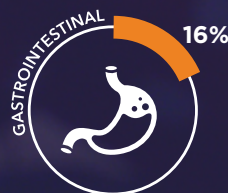
* Drawn from International SOS medical case management data across remote sites globally in 2022, as well as 'limb or life threatening' case escalation data from International SOS Assistance Centres in Africa, Europe and the Middle East.

Additionally, while the passenger profile for space tourism is akin to that of the aviation industry, the average age of an astronaut will be higher than the global average for airline passengers. Given our experience with in-flight medical emergencies over the last 30 years, it's not a question of if, but when an emergency will occur.

TYPES OF CASES IN A PRESSURISED CABIN*



Ears, Nose, and Throat Cases



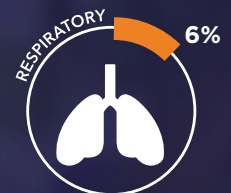
Gastrointestinal Cases



Neurological



Musculoskeletal



Respiratory

* MedAire Facts and Figures 2022

OUR MEDICAL TEAMS IN ACTION

The last thing you want is a medical emergency to delay your progress. You need the expert support of International SOS to protect your highly skilled workers, your astronauts and visitors.

Our medical professionals are some of the most highly trained in the field, able to identify situations that require immediate attention and provide the necessary stabilisation and care.

Because we understand that space launch missions are unique, we provide paramedics and doctors specifically trained to deal with incidents in that context.

In addition, our deep understanding of the common reasons workers may become ill allows us to intervene quickly to prevent costly delays. Supported by 27 Assistance Centres with a global network of medical advisors whenever and wherever you need them.

WE HAVE YOUR MEDICAL NEEDS COVERED

RAPID MOBILISATION: our global pool of experienced medical professionals is ready for advanced pre-screening by the relevant in-country security agency. This gives you confidence in rapidly mobilising paramedics or doctors to support your launch timetable.

LOCAL COMPLIANCE: we can provide medical professionals licensed under your local jurisdiction.

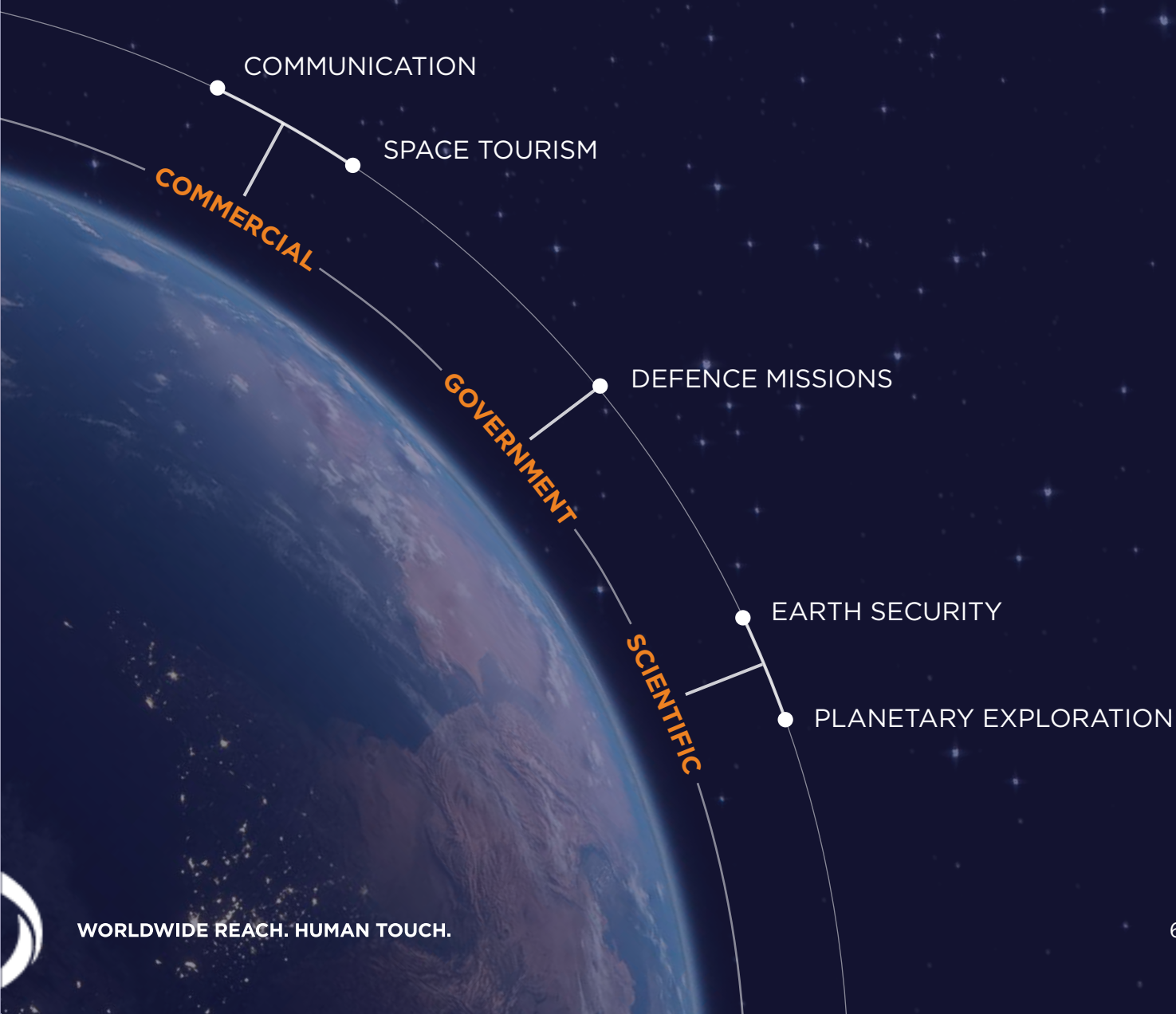
MULTILINGUAL SPECIALISTS: across major languages, including English, French, and Russian.

DUTY OF CARE: global distribution of cutting edge Aerospace Medical Kits, Diagnostic Equipment to prevent severe medical cases or the loss of your specialist assets.

EXPERT MEDICAL SOLUTIONS FOR UNPARALLELED SPACE MISSION SUCCESS

There are two separate paths to take to ensure operational resilience. First, proactively taking steps to prevent threats from affecting the mission while establishing policies and procedures to respond to threats when there is an impact. When considering possible threats, we focus on everyday and the most severe events that can disrupt the mission.

WE PROVIDE SUPPORT ACROSS MISSION TYPES



PREPARE

Preparing for a medical emergency before space launches can help prevent the situation from becoming life-threatening. Identifying potential risks and ensuring that the necessary medical supplies and equipment are on hand can help stabilise a patient and provide timely medical care.

FIT FOR MISSION

Annually we conduct over 18,000 health checks globally.

For the Aerospace industry we conduct around 24,000 passenger Fit-to-Fly assessments.

Establishment of **operational protocols** (emergency response plans) for potential response scenarios including infectious disease preparedness. Covers onward patient movement in the case of a severe medical emergency, provision of testing, isolation and quarantine facilities for disease outbreaks

Pre-mission assessments to ensure you clearly understand medical protocols, capabilities and potential gaps before launch, including recommendations on staffing needs, medical supplies and equipment

Pre-launch medical assessments for onsite engineers, technicians and astronauts to help identify potential health risks before the mission

COMPREHENSIVE PRE-LAUNCH SOLUTIONS

Health awareness sessions and specialised first aid training for launch site staff and astronauts. These can be delivered onsite, virtually, or through digital learning platforms to ensure that those on-site and onboard are trained to assist in emergencies, including CPR, and AED skills. Passenger training is vital in crewless missions because the responsibility will fall on the other passengers to assist

Simulation training to practice and prepare for potential emergency scenarios in a controlled environment. This is a critical part of the planning phase, which improves response time, identifies potential weaknesses, increases confidence in what worked well and enhances the communication between all parties

MISSION-HALTING INCIDENTS

We manage close to 290,000 medical cases across 1,000 remote client sites annually.

For the Aerospace industry we respond to around 36,000 in-flight calls per year.

During the past 35+ years we have helped with over 500,000 in-flight medical events

RESPOND

You are responsible for ensuring the safety and well-being of onsite engineers, technicians and astronauts. Our teams provide round-the-clock primary and emergency care and access to global medical capabilities, telemedicine, and coordination with local authorities as needed.

Remote and onsite medical solutions including call-out doctors, paramedics and nurses, providing round-the-clock primary and emergency care. Our on-site medical staff have access to global medical reach back capability through our Response Centres, telemedicine, MedLink, in coordination with local authorities as needed

Mobile medical equipment for patient assessment and stabilisation, including life-saving medical supplies and equipment

Ground-based medical advisors provide real-time advice and assistance to on-site medics and astronauts to enable them to respond calmly and confidently in an emergency. This is supported by advanced mobile technology to deliver a high level of remote medical care

Through MedLink we manage thousands of passenger in-flight medical events every year. In the event of an in-flight emergency, our team guides non-medical first responders with the use of onboard equipment such as AEDs and auto-injectors to confidently manage the situation

COMPREHENSIVE MEDICAL RESPONSE SOLUTIONS

RECOVER

International SOS offers a range of medical support solutions for the last leg of your space launch missions, from stabilising patients to providing follow-up care and post-mission evaluations.

Emergency response planning

Based on the operational profile, there may be limited options to help an unwell astronaut if onboard methods are ineffective. In addition, space flight and recoveries will require unique protocols to plan for what will happen after the spacecraft lands, and coordination with emergency medical services to take over astronaut care. Therefore, our team will prioritise astronaut safety and follow protocols to get the patient to the most medically appropriate location as quickly as possible.

Response at landing sites

Medical assistance at landing sites can help stabilise minor conditions and can be deployed on land or a marine vessel for ocean splashdown recovery.

Beyond the mission, International SOS also supports reputation management, care for hospitalised survivors, and assistance with search, recovery, identification, repatriation of deceased, and memorial services.

RETURN ON INVESTMENT

Avoiding costly disruptions is critical to mission success. Our teams are highly trained to identify and stabilise situations requiring immediate medical attention and provide routine primary care to avoid costly disruptions to the mission. You can expect a greater return on investment for less than 1% of your mission costs.

THE MULTIPLIER EFFECT

A comprehensive, integrated approach to health and safety response addresses all aspects of a potential emergency or crisis situation, including the medical response, emergency management, communication, and recovery efforts. Giving consideration to these factors results in a more effective and efficient response to a crisis. This approach is essential in remote locations or high-risk environments like those in space missions, where medical facilities and resources may be limited.



HEALTH CONSULTING

Including health site reviews, analysing and interpreting health data, HSE advisory and managing health crises.



24/7 HEALTH & SECURITY INFORMATION, ADVICE & ASSISTANCE

For staff working in, travelling to, or on assignment in remote or challenging environments.



MEDICAL EVACUATIONS

We have the medical and technical capability to evacuate patients with various medical conditions related to COVID-19 infection.



PROVISION OF MEDICAL STAFF & MEDICAL SUPPLIES

Including the full suite of clinical governance, clinical supervision and medical evacuation plans.



ON-SITE CLINICS

An on-site medical set-up that includes medical staff and supply, with a seamless link to remote support for supervision and assistance in case of emergencies.



MENTAL HEALTH & WELL-BEING PROGRAMMES

Including emotional support for staff.

WHY PARTNER WITH INTERNATIONAL SOS?

International SOS offers a comprehensive medical support solution for space launch missions that helps organisations maximise their investment.

By partnering with International SOS, you will gain peace of mind and reduce the likelihood of costly delays to your mission. Our deep understanding of the common reasons your employees may become ill and the emergencies that may occur enables on-site medics and in-flight crew members to respond calmly and confidently, ensuring better outcomes.

Trust International SOS to keep your space launch mission on track with expert medical solutions for unparalleled success.



BEST-IN-CLASS:

We provide internationally recognised standards of medical care underpinned by a stringent quality assurance system and clinical governance.



TURNKEY SOLUTION:

Irrespective of location, we care for your medical needs so you can focus on your core mission.



EXPERTISE:

We have been operating globally in the most remote, complex and challenging environments for over 35 years. Through MedAire, we have pioneered the concept of comprehensive Aerospace travel risk management solutions.



SPACE LAUNCH INDUSTRY:

We have extensive experience partnering with commercial organisations and governments to support space launch and recovery operations in French Guyana, India, Kazakhstan, Russia and the USA.

**Contact us for more information about our capabilities and
how we can support your space launch mission:**

Visit our website or scan the QR code for more information.



FOLLOW US

