

## Overview

As a global satellite operator, ABS has extensive in-house regulatory and satellite engineering expertise related to securing new orbital slots through International Telecommunications Union (ITU) filings and the program management of geostationary telecommunication satellites. This has allowed ABS to provide competitive telecommunications services while operating harmoniously with you, partners and nearby satellite operators.

Take advantage of our expertise on **ABSPlus Consult** from regulatory, to design, engineering and operation consulting services to meet your satellite, space and ground requirements.

## Services Include:



### Regulatory Consultancy

- Identification of suitable orbital locations
- ITU filings, e.g. coordination, notification, etc.
- Frequency coordination
- Securing landing rights
- Participation at ITU meetings

### Satellite Engineering Consultancy

- New satellite programs
- Training
- On-orbit engineering
- Ground infrastructure and system design

## Regulatory Consultancy

**Identification of orbital location** - The first step in providing successful satellite telecommunication services is identification of one or more suitable orbital locations from which the satellite can operate. ABS is able to identify potential orbital locations from which you can secure the necessary spectrum in order to operate a satellite to provide commercially viable communication services to your targeted markets.

**ITU filings** - Upon identification of a suitable orbital location, the next step is to register the satellite network with the ITU. ABS makes the ITU filings for its own satellites and, as such, has the in-house expertise and tools necessary to generate the ITU related filings to meet your operational requirements.

**Frequency coordination** - As with any telecommunication network, frequency coordination with other adjacent operators is key to providing competitive and commercially marketable services. With extensive experience in frequency coordination and knowledge of ITU radio regulations, ABS can coordinate with other adjacent satellite operators to achieve the necessary operational conditions.

ABS is also well qualified in identifying suitable orbital locations for the performance of In-Orbit Tests (IOT) of a satellite and coordinating that location with nearby satellite operators.

**Securing landing rights** - Many nations require satellite operators to secure domestic authorization prior to initiating service. ABS can also provide the necessary technical support required to obtain landing rights within targeted countries. Such support includes preparation of necessary engineering statements, link budget analysis, interference analysis, and any other required documentation or study.

**Participation at ITU meetings** - ABS participates in many regional and ITU meetings. As such, ABS can support your interests at these events. Such efforts include help in generation and submission of the necessary technical papers to the relevant ITU Study groups and/or regional groups, advocating your position at these groups all the way up to the World Radio Conference.

## Satellite Engineering Consultancy

**New satellite programs** - ABS can provide engineering expertise and overall satellite program management from start to finish for your satellite program. Throughout procurement, design, construction and launch, ABS has the proven ability to successfully manage all project steps from concept to handover. ABS has direct project experience with all major US and European satellite manufacturers. Our satellite and network engineering teams can support both satellite system and ground infrastructure definition and design. Our satellite program management team will prepare procurement documents, evaluate proposals and negotiate contracts to get your satellite project started. We can then monitor the satellite design and manufacturing phase to assure your requirements will be met. ABS' experiences with all major launch services can help you select the optimal launch vehicle and can contract and manage the launch of your satellite, as well as obtain launch and in-orbit insurance. Our teams can ensure deployment of any ground infrastructure you require and oversee in-orbit testing and the initiation of service on your new satellite.

**Training** - If you choose to operate your own satellites, ABS can offer instruction to operations teams in all areas of satellite control, for both new operations teams and experienced teams on a new spacecraft bus. We can provide training for satellite control teams, on-orbit operations engineering, flight dynamics and operations procedure developers to enable you to fully operate your own satellites.

**On-orbit engineering** - Once launched, ABS teams can provide additional engineering consultancy as you operate your own satellites. Our engineers can support anomaly management including anomaly response, recovery, investigation and corrective action implementation. Our flight dynamics teams can optimize fuel use, provide co-location strategies, and support space situational awareness activities. As your needs change, we can support mission re-assignment, orbit re-location, or inclined orbit operations to maximize the useful commercial life of your satellite and can support the safe final de-orbit and retirement of your satellite. Our innovations and experiences allow ABS to provide engineering consultancy services that can enhance your operations.

**Ground infrastructure and system design** - You can take advantage of our expertise to design, build and operate your ground facilities and services. Our expertise and hands-on support can develop a comprehensive plan to integrate the ground service systems with your network for optimal service delivery.

## Satellite Engineering Experience:



- The first all-electric commercial satellite on-orbit.
- The first operations outside of earth sensor linear operating range.
- The first electric propulsion satellite to deplete xenon and continue station-keeping on chemical propellant.
- Satellite operations in adjoining station-keeping boxes within the same orbital slot.
- Operations in extended, inclined orbits.
- Operating a new bus or new subsystem design.
- Successful fleet integration of both newly launched spacecraft and previously operated spacecraft.

## Contact:

For further inquiries about **ABSPlus** services, email to: [ABSPlus@absatellite.com](mailto:ABSPlus@absatellite.com)