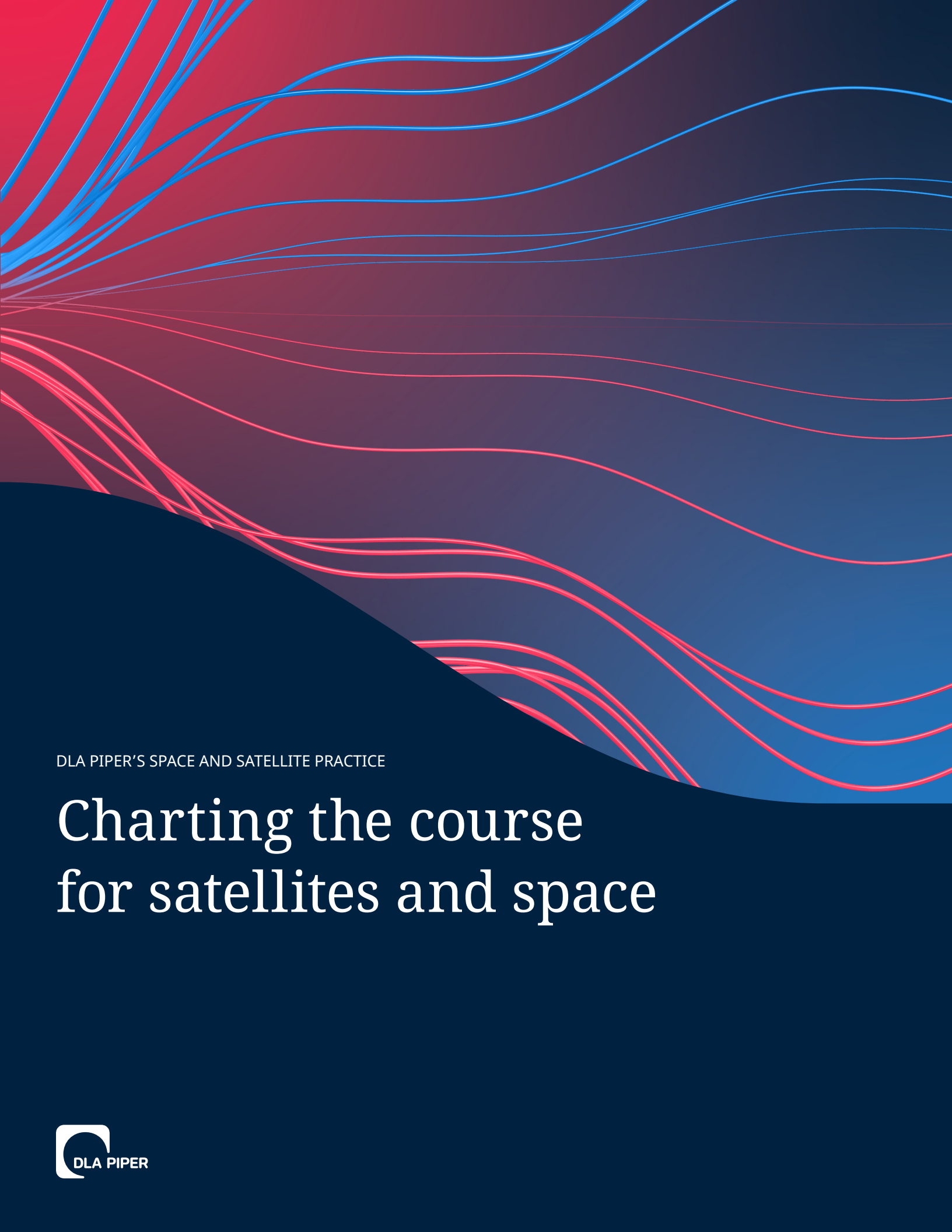




DLA PIPER'S SPACE AND SATELLITE PRACTICE

Charting the course for satellites and space



Space and satellites

The deployment and operation of increasingly sophisticated spacecraft and satellite networks can bring legal, regulatory, and technical hurdles that require creative, cost-effective solutions. DLA Piper has the capacity, knowledge, and global footprint to help enable space and satellite technologies around the world.



The DLA Piper advantage

Capabilities

DLA Piper has a global presence in satellite practice and is currently engaged in multiple satellite projects spanning more than 100 countries. We help operators acquire the necessary regulatory authorizations from administrations around the world, while also drafting and negotiating business agreements for satellite services, satellite gateways, and user terminals.

Our team members have strong technical backgrounds, with experience in radio spectrum allocations, frequency registration procedures, and various coordination requirements – all of which are detailed below.

Our core areas include:

- **Spectrum allocations.** The engineers on our team understand the allocation of radio spectrum for satellite services across a variety of countries, with a focus on shaping the future of orbit and spectrum resources for space technologies. With these capabilities, we advise operators on the spectrum available for new services globally, regionally, and on a country-by-country basis.
- **Securing launch and operating authorizations.** We provide spectrum regulatory advice, filing, and coordination services that allow for some of the largest satellite networks in the world to operate globally and continue innovating. We take care of due diligence assessments for the regulatory and technical aspects of satellite platforms, operations, and procurement contracts for systems, as well as securing required authorizations globally.
- **Securing US satellite imaging authorizations.** We assist satellite imaging clients in navigating the US regulatory licensing and compliance processes established by the National Oceanic and Atmospheric Administration (NOAA) Commercial Remote Sensing Regulatory Affairs office.
- **User terminals and devices.** We advise on the regulatory requirements for deploying user terminals and earth stations. Our experience conducting surveys of these requirements for dozens of countries enables us to systemize our approach and establish timelines for receiving approvals on a cost-effective basis.
- **Gateway and network infrastructure.** Network topology and gateway earth stations, which provide for both control and data to the space asset, are critical components of space systems. We offer clients a suite of services that includes real estate leasing arrangements, entity formation, lawful intercept compliance, licensing, and radio interference analysis. Our team is experienced in meeting the unique requirements for gateway facilities and associated networks across multiple countries.
- **Commercial requirements.** We draft and negotiate business agreements for satellite services, satellite gateways, transponders, and user terminals.

- **Multilateral negotiation of coordination agreements.**

Working with our team of legal, regulatory, and engineering advisors, we can lead negotiations with other operators – both commercial and government – on coordinating spectrum and orbital resources for geostationary satellite orbit (GSO) and non-geostationary satellite orbit (NGSO) systems operating in any space radiocommunication service consistent with international and local requirements.

- **Supporting innovative missions.** New space systems and services are often difficult to define and do not fit neatly within existing regulatory and commercial frameworks. Such innovative missions could involve mission extension; Internet-of-Things; radiofrequency sensing and geolocation; orbital debris removal; weather forecasting; in-orbit servicing and transportation; non-earth imaging; lunar missions; and commercial positioning, navigation, and timing (PNT). Our team works with key government stakeholders, in many jurisdictions, to identify legal and technical solutions to facilitate such innovative missions.

- **Direct-to-device.** Direct-to-device (D2D) satellite services aim to connect mobile phones in remote, unserved, and underserved areas directly to satellites, bridging the gaps inherent to terrestrial mobile networks. Whether you are interested in (i) partnering with existing satellite operators using mobile-satellite service (MSS) spectrum or (ii) partnering with mobile network operators (MNOs) to use part of their licensed mobile service (MS) spectrum as a complement to existing infrastructure, our team of advisors is ready to meet your needs.

- **Lunar exploration.** Humanity is racing back to the moon with innovative lunar missions ranging from deploying communication relay systems to establishing long-term human outposts. Whatever the ambition, our team has the legal and technical experience to help clients navigate the federal and non-federal processes by preparing the requisite documentation for obtaining the approvals necessary for launch.

- **Global consultations.** Our team monitors the telecom-related activities of more than 100 national regulators related to telecom matters, with particular focus on space and satellite regulations. We can meet your diverse needs by identifying consultations relevant to your interest and developing strategic responses to those consultations that require engagement.

- **Space safety and sustainability.** Space is among the earth's shared resources. The dramatic increase in space-related activity has led governments around the world to ensure its long-term sustainability. These developments impact the strategic plans of satellite operators. As space operations increase, countries are enforcing newly formulated space safety regulations and policies to secure exploration and

a shared utilization of outer space. Our team is up to date on the existing and proposed rules and recognizes both the burden and opportunity of space safety and sustainability. We are actively tracking this issue and helping ensure that the voices of business stakeholders are represented in the policy-making process.

Several members of our team have served in senior roles in or on US federal advisory committees to organizations, including the Department of Commerce's NOAA and the National Telecommunications and Information Administration (NTIA), and the Federal Communications Commission (FCC). Our advisors also have experience working with the International Telecommunication Union (ITU), regional organizations such as European Conference of Postal and Telecommunications administrations (CEPT), Inter-American Telecommunication Commission (CITEL), and the International Telecommunications Satellite Organization (ITSO), and have participated in World Radiocommunication Conferences that affect the shared use of radio spectrum for both terrestrial and satellite-based services.

Engineering capabilities

The Telecom group includes engineers who focus on spectrum development and management issues, including coordination, interference resolution, and authorization questions. Our engineers have technical knowledge suited for ITU advocacy and satellite system coordination issues. This includes modeling satellite systems that cooperate with any other space or terrestrial system to demonstrate their compatibility. We also perform ground-path interference analyses to enable coexistence between satellite ground equipment and a growing demand for spectrum by terrestrial uses like 5G, 6G, and future innovations. Our engineers are able to convey complicated concepts in practical language that facilitates informed business decisions.

Competitive fee arrangements

We provide practical and relevant advice to assist our clients with their short- and long-term legal and business objectives in a timely and cost-effective manner. Alternative fee options are as varied as the types of services offered by the firm and include fixed fees, discounted hourly rates, and shared risk and success provisions.

Geographic coverage

DLA Piper has represented some of world's leading satellite companies, as well as small startups, in key markets across the globe. As a result of this work, we have developed a database for the basic regulatory frameworks in each of these countries, and we have a practical understanding of how the relevant authorities view the establishment of new services within these jurisdictions.

About us

DLA Piper is a global law firm with lawyers located in more than 40 countries throughout the Americas, Europe, the Middle East, Africa, and Asia Pacific, positioning us to help companies with their legal needs around the world.

For more information

To learn more about DLA Piper, please visit dlapiper.com or contact one of our team members.

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