INTRODUCTION

This Chapter provides an overview of the detailed planning and installation of the telecommunications cables that operate to transmit voice, data and internet communications around the world. The work that goes into achieving these installations is undertaken by a small group of experts of many nationalities based around the globe. Their expertise ensures that submarine cables can be installed anywhere from the deepest parts of the oceans to diverse landings on all continents. Cable system installation entails five major stages: the planning and surveying stage, applying for permits, the manufacturing stage, ship loading stage, and the cable laying stage. The planning and surveying stage has been addressed in Chapter 4. This Chapter will provide an overview of the application for permits (Part I), cable manufacture (Part II), ship loading (Part III) and laying operations (Part IV). It will then discuss the law and policy challenges for laying operations (Part V) and conclude with some recommendations on how these challenges can be addressed (Part VI).

I. APPLYING FOR PERMITS

Telecommunications cables are by their very nature designed to connect many States. The permitting and legal regulations that need to be observed may be wide-ranging. It is necessary to have a thorough understanding of the jurisdiction applicable to each portion of the cable in order to ensure that the correct permits are sought and issued prior to cable surveys or installation being undertaken. This is critical for ensuring that the cable can be installed in the first instance and that there will be no delays in the cable installation. The permitting process is often the critical path of any submarine cable project.

Accordingly, after a cable route has been identified, the next stage is to identify the permits required for each segment or section of the cable route and to
enter into discussions and negotiations with the relevant permitting authorities at the earliest opportunity. The first permit required, to ensure the cable can be installed in the planned Cable Landing Stations, is the Telecoms Operations License or Landing License. These are issued by the national governments of the countries where the cable is landing. Once this license is in place, the Permits in Principle (or System Permits) and the Operational Permits can be applied for. The Permits in Principle are the system owner’s submissions to, and/or permissions from, governmental agencies that authorize the cable to be placed and remain on the seabed for the duration of the cable system’s life. They also apply to the land sections of the cable route. The Operational Permits are the permits required by the cable system provider and/or the installer to carry out all of the activities needed to install the cable on land and on/under the seabed (including access for cable route survey vessels and cable laying vessels etc).

**Permits for the Land Section of the Cable**

Each cable landing has a ‘Landing Party’. This is generally a telecommunications company based within the country where the cable is landed. These companies are critical in assisting with and obtaining the permits for the Cable Landing Station, land based fronthaul cable route and beach manhole selection and installation. The Landing Party is also likely to be a key contact for obtaining the marine permits and liaising with stakeholders in the vicinity of the marine portion of the cable landing.

**Permits in Principle/Operational Permits**

When the Telecoms Operating License has been approved, the Permits in Principle must be obtained for the route permits and/or approvals from the various governmental stakeholders at national and local levels. These stakeholders may include Ministries of Communications, Environment, Defence, Transport, National Security, Coast Guard agencies, and the Hydrographic Office in each country where the cable is landing. Permits in Principle must also be obtained from countries whose territorial waters the cable passes through, but does not land. A number of States also require permits for transiting the EEZ or continental shelf even though the cable never enters into the territorial waters, especially if the EEZ includes offshore exploration areas. This will be dealt with below.

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