Contracting for Space: Contract Practice in the European Space Sector, Lesley Jane Smith and Ingo Baumann (eds), [Farnham, UK: Ashgate Publishing, 2011, 428pp, hardcover] ISBN 978 140 941923 5

Rapid development of space technologies in the last few years aroused heated discussions on how to make use of space technologies and outer space for the benefit of human beings. Space commercialisation proves to be one viable means to realise that goal. While plenty of research has been done to examine the process of space commercialisation on the American side, so far very few studies have concentrated on the progresses made on the European side. This edited book makes an important contribution in filling in the gap in the existing literature.

As the editors correctly observe, significant developments have been made across the European space sector in the last decade. Contract functions as the essential element in realising the commercialisation and privatisation of space activities. While various levels of laws and treaties are in place to guide the conclusion and implementation of space contracts, it would be most meaningful at the current stage to examine the current practice and come up with a clear and coherent contract practice within the European space sector.

The book consists of one introductory part, four substantive parts and one concluding part. An initial examination of the book reveals that it is one of the most thorough academic works under the editorship and direction of two renowned space lawyers. This finding is further substantiated by the fact that 40 leading scholars and practitioners in the field are involved in the project.

The introductory part offers an excellent overview of the interaction between space policy and space commerce at the European level. The EU's new space competence and the co-operation between the European Union and ESA provide a solid basis for the sustainable development of the European space sector. Such co-operation is conducive to the development of a consistent and compatible space policy so that the competitiveness and efficiency of the European space industry can be strengthened.

International space treaties, the EU law, national space legislation constitute a complicated legal framework for regulating space contracts in Europe. Part II of the book starts with an excellent piece on the application of international space law to space industry contracts, which sets the tone for the whole part. Several documents have been released by the European Union to well define the EU's involved in space activities and European space policy. With the international space treaties and European Space Policy overarching the development of space activities

284 **Yun Zhao** (2012) HKLJ

in Europe, several European countries have already had their own national space legislation, setting down important rules on licensing and authorisation, liability and jurisdiction. Part II lays the basis for further discussions on regulatory regime for space industry contracts.

The following two parts deal with general and specific aspects of space industry contracts respectively. As indicated earlier in Part II, space industry contracts are very complicated and face management challenges; this situation is further exacerbated by the existence of "the wide range of agreements" and "the substantial attendant risk inherent in these contracts (p 161)". Part III specifically picks up the procurement practices to elaborate space contracting process. The discussions over the procurement practices fit perfectly well within the framework of regulatory regime for space industry contracts. Such an arrangement resonates with the view expressed in Part I that "Once governments were deprived of their full control over industry, 'industry' policy quickly turned into 'procurement' policy (p 36)".

Part IV deals with 10 nicely selected specific aspects of space contracts: performance and warranty articles, cost overturns, insurance, export control, service level agreements, liability, intellectual property, security, applicable law and dispute resolution, and filing of satellite systems. The combination of Parts III and IV presents to the readers a clear picture of how space industry contracts are negotiated, managed and performed. These two parts are particularly important in the sense that the authors are able to well summarise and analyse the ongoing contracting practice, which can be directly used in future both by practitioners in their daily business and by policy makers in their regulatory activities.

Following the conclusion of space industry contracts, the procured objects shall start functioning. Right at this stage, satellite services contracts come into play. Part V continues in-depth examination of three specific issues: launch services agreements, satellite capacity agreements and earth observation data policy. Since the space policy of the European Union "focuses on space applications and their potential support to other fields of European policy", (p 2) satellite services contracts have become increasingly important in order to reach the policy goal of developing a broad downstream market. Again, the three issues selected in this part echo the standpoint on the four potential promising downstream markets: "satellite navigation, telecommunication application, earth observation and space launchers (p 13)". Compared to Parts III and IV, this part is relatively short; this is understandable as the downstream markets are far from mature and still on the process of development. It can thus be expected that future research could further expand this part and enrich the practice in satellite services contracts.

Vol 42 Part 1 Book Reviews 285

With space commercialisation and privatisation well underway, more and more private entities will get involved in space contracting. The participation of private entities in space activities will add to the complexity in the practice of space contracting. As the editors correctly noted in the concluding part, "contracts in the space sector...show a low degree of standardisation, with individual negotiations generally prevailing over the use of general terms and conditions (p 420)". It will be increasingly difficult to figure out the general practice in space contracting, which shall be challenging for space practitioners. In this regard, I must commend that the editors and the authors have done an excellent job in providing "a first-hand insight into the legal framework surrounding European space projects, as well as into standard problems and best practices solutions when drafting and negotiating space project contracts".¹

This book reflects the successful results of the initial conference at Bremen, Germany during 26–27 November 2009 for the academic project "Contracting for Space". One distinct feature of this conference is that many practitioners were specifically invited to share their experience in space contracting; naturally, the discussions in the book predominantly show the current practice in space industry. With around 40 experts involved in the project and with skillful management of the two editors, the book is a valuable contribution to the literature on the development of space law and space commerce in Europe. Such literature is not only useful to space practitioners involved in contract negotiations and management, but also to space lawyers researching on the legal issues in space commercialisation.

Yun Zhao*

¹ Contracting for Space II, available at http://www.contracting-for-space.eu (visited 18 Oct 2011).

^{*} Associate Professor, Faculty of Law, University of Hong Kong.