The Legal Framework for Space Projects in Europe: Aspects of Applicable Law and Dispute Resolution

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Chapter 29
The Legal Framework for Space Projects in Europe:
Aspects of Applicable Law and Dispute Resolution
Frans von der Dunk

Introduction

Space projects in Europe take place in a complicated environment involving many public, private and intergovernmental actors, where the participation of the private sector, as independent space operators or as sub-contractors to others, is usually subsumed under the label of ‘the space industry’, producing hardware, software and services to be used in outer space, in support of space activities, or using products, data or information generated with the help of space activities.

Such private, semi-private and quasi-private actors use contracts as the main mechanism to protect their interests, the freedom to contract within the rule of law being the paramount overarching legal principle. However, because of the large measure of governmental and intergovernmental activity and involvement in the space arena and the manifold public aspects of using space those governments might perhaps be expected to subject that freedom to contract to restrictions in the context of the space sector much more than in other sectors.

Moreover, in view of the almost inherent international character of most space activities in Europe, such governmental interference with the private space sector would likely lead to many issues of potentially conflicting jurisdictions. The current contribution attempts to analyse some of these issues from the perspective of the national space laws that have been enunciated in European countries2 and their intricate relationship to the international space law regime.

These national space laws have been drafted at least partly to implement the applicable international regime vis-à-vis the private sector (notably, in this context, the Outer Space Treaty3, the Liability Convention4 and the Registration Convention5), which therefore also has to be kept

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1 For example, most of the so-called ‘primes’, commercial entities sizable enough to serve as ‘prime contractors’ to ESA and the major national space agencies, are actually international consortia composed of companies from various Member States.
2 For the present purpose, ‘European’ is taken to refer to the Member States of the European Union and/or ESA; i.e. the Russian Federation and the Ukraine, though both European states in a geographical sense as well as having developed national space legislation, will not be taken into account.
4 Convention on International Liability for Damage Caused by Space Objects (hereafter Liability Convention), London/Moscow/Washington, done 29 March 1972, entered into force 1 September 1972; 961 UNTS 187; TIAS 7762; 24 UST 2389; UKTS 1974 No. 16; Cmnd. 5068; ATS 1975 No. 5; 10 ILM 965 (1971).
5 Convention on Registration of Objects Launched into Outer Space (hereafter Registration Convention), New York, done 14 January 1975, entered into force 15 September 1976; 1023 UNTS 15; TIAS 8480; 28 UST
in mind for the current purpose. At the same time, when enunciating their national space laws, the states that did so — Norway (1969), Sweden (1982), the United Kingdom (1986), Belgium (2005), the Netherlands (2007) and France (2008) — did not necessarily limit their scope to covering subject matter covered by the aforementioned treaties. States might well extend the scopes of their national laws to include other areas of the space arena, thus impacting contracts dealing with issues not addressed or impacted by the international space treaties.

The National Space Laws and the Scope of Jurisdiction over Private Entities involved in Space and Space-related Activities

The first part of the analysis concerns the definition of the scope of the six national space laws at issue to determine to what extent the respective authorities under these laws and their licensing systems, at least in general terms, could impact the freedom to contract. This analysis, on second view, has to address two connected issues: (1) which categories of activities are concerned \textit{ratione materiae}; and (2) which categories of (private) actors undertaking them are concerned \textit{ratione personae}. For it is contracts related to those activities, respectively undertaken by those actors, that would be most fundamentally concerned.

The Categories of Activities Falling within the Scope of the National Space Laws

As the title of the Norwegian Act of course implies, its requirement to obtain permission only applies to the launch of objects into outer space. All five other national acts do essentially encompass all activities normally considered space activities: launching and satellite operations as well as, at least in principle, commercial manned spaceflight. Beyond such general coverage of what Articles VI and VII of the Outer Space Treaty and the Liability Convention are concerned with at the international level, each of them takes a slightly different approach on what is \textit{also} requiring a licence under the relevant act.

695; UKTS 1978 No. 70; Cmdn. 6256; ATS 1986 No. 5; 14 ILM 43 (1975).


12 See Sec. 1, Norwegian Act on launching.
In Sweden, ‘all measures to manoeuvre or in any other way affect objects launched into outer space’ are thus included in the licence obligation, yet ‘merely receiving signals or information in some other form from objects in outer space’ is not, and neither is the launch of sounding rockets. Under the UK Outer Space Act, not only ‘any activity in outer space’, but also ‘procuring the launch of a space object’ requires a licence.

The scope of the Belgian Space Law ratione materiae encompasses ‘the activities of launching, flight operations and guidance of space objects’, where the last two terms are further defined as ‘any operation relating to the flying conditions, navigation or evolution in outer space of the space object, such as the control and correction of its orbit or its trajectory’. The Dutch Space Law looks very identical: ‘the launch, the flight operation or the guidance of space objects in outer space’ as constituting ‘space activities’ all require a licence under the Law. In addition, however, the scope of the licensing obligation can be extended to ‘the organisation of outer space activities’. The Explanatory Memorandum accompanying the Law indicated that the legislators especially eyed the possible desirability to include the organisation of space tourist activities in this phrase in the future.

Finally, the French Law on Space Operations uses the key term ‘space operation’, meaning ‘any activity consisting in launching or attempting to launch an object into outer space, or of ensuring the commanding of a space object during its journey in outer space ... and, if necessary, during its return to Earth’, to determine the scope of the authorisation regime ratione materiae. Furthermore, also the French Law includes the ‘mere’ procurement (as opposed to the ‘real’ space activity) of launching. Finally, the Law deals with the activities of programming earth observation satellite systems and handling the resulting data in a special context designed to ensure protection of French defence interests.

In sum: the six national regimes thus surveyed at the highest level offer a different mix of activities ratione materiae requiring a licence or authorisation. The only common denominator here would be that all those extensions still concern activities in the form of services; the manufacturing of products is not touched upon.

13 Sec. 1, Swedish Act on Space Activities. See also Sec. 2.
14 Sections 1(c), resp. (a), 3(1), UK Outer Space Act. Whilst there is no uniform view on what ‘procuring’ precisely means, it is generally accepted to constitute a rather broad term encompassing at any rate the customer of the launch at issue. It may be noted, furthermore, that under Sec. 13(2), UK Outer Space Act, ‘a person carries on an activity [in outer space] if he causes it to occur or is responsible for its continuing’, which also constitutes a rather broad concept.
15 Sections 2(1), resp. 3(5), Belgian Space Law.
16 Sec. 1(b), Dutch Space Law. See also Sec. 3(1).
17 Sec. 2(2)(b), Dutch Space Law (emphasis added).
19 Art. 1(3), French Law on Space Operations. See also Art. 2.
20 See Art. 2(3), French Law on Space Operations.
21 See Arts 1(7), 23-5, French Law on Space Operations.
22 It should be noted that this is not altogether that self-evident; for example Russia and the Ukraine have principally included ‘space research’ and ‘creation (including development, manufacture and test) of, as well as using and transferring space techniques, space technologies, other products and services necessary for carrying out space activities’ (Art. 2(1), (2), Law of the Russian Federation on Space Activities, No. 5663-1, 20 August 1993, effective 6 October 1993; National Space Legislation of the World, Vol. I (2001), at 101), respectively ‘construction and application of space engineering’ (Art. 1, Law of the Ukraine on Space Activities, No. 502/96-VR, 15 November 1996; National Space Legislation of the World, Vol. I (2001), at 36)
The French Law on Space Operations is the only national act that, in addition to a broad sweep of space activities properly speaking plus procurement of launches, makes reference to ‘those [entities] taking part … in the production of the space object(s) the launch or operation of which is part of the [space] operation’. It does so, however, only in the context of defining ‘third parties’, from which such manufacturers are excluded, and not of the licensing requirement; its main effect is thus to handle the liability aspects differently from those vis-à-vis third parties.

The Categories of Private Actors Falling within the Scope of the National Space Laws

The scope ratione personae of the Norwegian Act on launching as a matter of fact is defined firstly by means of the territorial and quasi-territorial criteria: anyone launching from Norwegian territory, ships or aircraft requires permission under the Act. Secondly, however, Norwegian national or permanent residents require such a permission also if they launch from ‘[a]reas that are not subject to the sovereignty of any state’, so that no other state would be able to assert territorial jurisdiction over such activities. Scandinavian neighbour Sweden has followed a more comprehensive approach: both relevant activities undertaken from Swedish territory and such activities undertaken by Swedish nationals require a licence.

The United Kingdom in this context is the odd man out, in that the licensing requirement is limited ratione personae only to UK nationals. At the same time, the UK Outer Space Act is the first European national space law consciously dealing with the possibility of competing jurisdictions. Firstly, the licence requirement is waived ‘for activities in respect of which it is certified by Order in Council that arrangements have been made between the United Kingdom and another country to secure compliance with the international obligations of the United Kingdom’, presumably including adherence to the licensing requirements or a comparable system of authorisation and supervision of such other country. Secondly, more generally that requirement may be waived if the Secretary of State ‘is satisfied that the requirement is not necessary to secure compliance with the international obligations of the United Kingdom’.

Belgium uses both key criteria for establishing jurisdiction through the licensing requirement, albeit again in different fashion. Anyone undertaking the relevant activities from anywhere within Belgian territorial or quasi-territorial sovereignty, including the use of installations, personal or property of the Belgian state, requires an authorisation. In addition, Belgian nationals, whether

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23 Art. 1(6), French Law on Space Operations (emphasis added).
24 Compare Arts 19–20, French Law on Space Operations, on liability towards persons taking part in the space operation with Arts 13–18 on liability towards third parties.
25 See Sec. 1(a), (b), Norwegian Act on launching.
26 Sec. 1(c), Norwegian Act on launching.
27 See Sec. 2, Swedish Act on Space Activities.
28 See Sec. 2 in conjunction with Sec. 3, UK Outer Space Act.
29 Sec. 3(2)(b), UK Outer Space Act.
30 Sec. 3(3), UK Outer Space Act. Such a satisfaction would most likely only be generated by another state exercising its jurisdiction in sufficiently serious fashion.
31 See Arts 2(1), 4, Belgian Space Law.
natural or juridical persons, require such an authorisation 'when provided for under an international agreement ... irrespective of the location where such activities are carried out'.

The Netherlands primarily focuses on territorial and quasi-territorial jurisdiction, requiring a licence from anyone undertaking space activities as defined from Dutch soil or Dutch-registered ships or aircraft. It uses its personal jurisdiction in a subsidiary fashion, namely only where certain activities are undertaken 'from the territory of a State that is not party to the Outer Space Treaty or on or from a ship or aircraft that falls under the jurisdiction of a State that is not a party to the Outer Space Treaty' – thus primarily aiming to fill a potential gap in the application of the latter.

Thus the Dutch Space Law to a limited extent takes into account complications arising from multiple licensing obligations, as application of personal jurisdiction and, as far as the organisation of space activities is concerned, territorial and quasi-territorial jurisdiction, is made subject to specific regulatory follow-up action. Unlike the UK Outer Space Act, however, it does not so much provide for a mechanism to waive a licence obligation in case other licensing obligations are applicable, but rather for an a priori gap of application of a licence which can then be filled – in particular if not filled by another state.

Also ratione personae the French Law on Space Operations is the most sweeping in scope. In the first instance, every French operator also if acting outside France would also require an authorisation, if launching, procuring launches of or commanding space objects. Such an authorisation also brings with it certain benefits in terms of a limit on the reimbursement by the authorised operator of the French state should the latter be obliged to answer international liability claims under the Liability Convention. Interestingly, such benefits are then extended to operators undertaking the relevant activities from the territory or quasi-territory of other Member States of the European Union or European Economic Area (EEA) if these activities form part of activities undertaken from France and are duly authorised as such.

Taking into consideration that activities to be authorised under the French Law in Space Operations may also require licences from other states, leading to the most fundamental and substantial potential for competing jurisdictions, France allows for a quite sophisticated and tailor-made waiver mechanism.

Summing up, the various national acts discussed indeed leave ample room for potentially conflicting jurisdictions, all except the United Kingdom applying both territorial (including quasi-territorial) jurisdiction automatically, and at least potentially (and not necessarily with due regard for the application of another state’s territorial jurisdiction) personal jurisdiction as well. Of these,
however, only the United Kingdom and (essentially) France have formally allowed for the waiver of licensing requirements focusing in fact on instances where multiple jurisdictions may be at stake.

The National Space Laws and Dispute Settlement

This brings analysis to the last issue to be discussed here: to what extent have the six laws at issue taken into account the possibility of legal disputes regarding rights or obligations under, or elaboration and implementation of the respective laws and their provisions? Answering that question for Norway is easy: the half-page, three-section Act does not contain any clause related to dispute settlement.

The Swedish Act on Space Activities refers to the Swedish Penal Code as the law largely applicable to severe violations of the Act and any licence granted under it for violations, and provides for jurisdiction of Swedish courts in such cases.\(^\text{39}\) This explicitly applies also to persons responsible for such violations outside of Sweden, as long as they can be properly prosecuted in Sweden. Penalties imposed can be fines or imprisonment of up to one year. Only the Swedish Government is entitled to initiate prosecution, the details thereof as following from the Penal Code.

Also under the UK Outer Space Act violations of its provisions or of a licence granted under it committed outside of the United Kingdom would still be subject, in principle, to the jurisdiction of the UK court system.\(^\text{40}\) Furthermore, the UK Outer Space Act makes brief reference to general criminal law provisions, in that a fine may be imposed, which on summary conviction may not exceed 'the statutory maximum'.\(^\text{41}\)

The Belgian Space Law also addresses dispute settlement primarily in the context of licence applications, refusals thereof and counterclaims by the Belgian state in case of international liability compensation being paid – meaning: how such claims will be handled as between the Belgian state and the licensee.\(^\text{42}\) There is no specific reference whatsoever to jurisdiction of the Belgian courts on such claims; consequently such claims will essentially fall within the general Belgian administrative law regime, with any potential international involvement being dealt with by the Belgian rules on private international law.

More or less the same could be said about the Netherlands, although in this case the reference to such an administrative law regime is made explicitly.\(^\text{43}\) Furthermore, the possibility to institute criminal proceedings in the context of the Law or a licence granted under it, under either the Dutch Criminal Code or the Economic Offences Act, is not excluded.\(^\text{44}\) Again, however, apparently no specific reference to jurisdiction of Dutch courts over relevant disputes is considered necessary. In case of involvement of non-Dutch entities the standard rules of private international law (in this

\(^{39}\) See Sec. 5, Swedish Act on Space Activities.

\(^{40}\) See Sec. 12(4), UK Outer Space Act, although, in view of the exclusively-personal scope of the licensing system, this can only concern UK nationals. Cf. also para. (6).

\(^{41}\) See Sec. 12(2), UK Outer Space Act.

\(^{42}\) See e.g. Art. 15, Belgian Space Law.

\(^{43}\) See e.g. Sec. 14(1), Dutch Space Law, where the government is empowered to use administrative orders to apply and enforce specific Sections of the General Administrative Law Act in the context of licensing or disaster investigation under the Dutch National Space Law. Cf. also further references to the General Administrative Law Act in Sections 14(2), 15.

\(^{44}\) See Sec. 16(2)(e), Dutch Space Law.
The case of course (the Dutch rules) would determine the extent of such jurisdiction just as if the dispute would concern another economic sector.

The French case is particularly interesting because of the explicit reference to operations not (primarily) conducted from French territory and by non-French nationals, as discussed before. Also the French Law on Space Operations, however, does not offer much detail on dispute settlement issues, beyond a general reference to the Insurance, Public Health and Penal Codes.\textsuperscript{45} The President of the Tribunal de grande instance is only mentioned as the authority to enforce access to facilities of licensees and suchlike.\textsuperscript{46}

The main conclusions to be drawn from this summary analysis on dispute settlement concern the general approach to economic and commercial space activities, from the perspective of jurisdiction, applicable law and dispute settlement: not to treat them any differently from other economic and commercial activities. Not even the much more fundamental likelihood of international involvement and complications here, of international state responsibility and/or liability being at issue, of security and other strategic interests being at stake, or indeed of the involvement of European organisations, were seen as calling for a special treatment. No doubt, such an approach largely follows from the character of the space laws investigated, being by and large general framework laws taking care primarily of governmental worries that private space activities conducted under their control might cause trouble and/or at the same time need to be stimulated appropriately for the greater public – but still, essentially, national – benefit. Normal administrative law or similar procedures would still be able to handle any disputes in this context appropriately, even as they may much more frequently come to be confronted with the involvement of intergovernmental organisations enjoying a certain level of functional immunities and/or of private entities from other jurisdictions and licensed in those.

Probably only with a more fundamental involvement of the European Union – in which respect the Treaty of Lisbon\textsuperscript{47} does not represent as large a step forward as many would have liked it to represent – this might change. Fundamental pieces of EU legislation such as Regulation 44/2001/EC (‘Brussels I’)\textsuperscript{48} and Regulation 864/2007/EC (‘Rome II’)\textsuperscript{49} have shown the competence as well as the willingness of the EU institutions to harmonise the national regimes for private international law in several fundamental respects.

The Future Outlook

To sum up: the six national space laws all apply their own approach \textit{ratione materiae} and \textit{ratione personae} to the establishment and exercise of jurisdiction over the space industry – generally without much attention for the potential clashes of jurisdiction arising from, for example, the

\textsuperscript{45} See Art. 7(1), French Law on Space Operations; this is however in the context primarily of the competence to monitor certain of the requirements imposed by the Law. Cf. also Art. 10, referring to the Code of Criminal Procedure in this context; Arts 21, 27, referring to the Research Code and Art. 22, referring to the Intellectual Property Code.

\textsuperscript{46} See Art. 7(II), French Law on Space Operations.


application of territorial jurisdiction of one state and the application of personal jurisdiction of other
states to an essentially conglomerate space endeavour. This is done so, largely, for the purpose of
establishing the necessary controls by means of a licensing system, and thus essentially relates to a
state-private company relationship not altogether different from many such relationships covered
already by general national law. As a consequence, also, little attention is being paid to specific
dispute settlement questions that may arise.

A further factor to be kept in mind here is that 22 other EU Member States do not have
any national framework law specifically for licensing space industry participants, whereas the
Union itself under the current regime is not entitled to take fundamental steps in this field, either.
The general legal regimes of those states would certainly become involved, and likely invoked,
however, once issues similar to licensing, responsibility and liability would arise in those states;
in such scenarios the jurisdictional authorities would then have to do even without any summary
guidance that the national framework space laws might provide.

Precisely for such reasons, it is likely that in at least a number of those 22 countries development
of a national space law will become a serious issue soon. Once there would be considerably more
than six national space laws in the EU Member State community, a need might arise, and initiatives
may be actually undertaken, to harmonise them at least as to their effect in the private, commercial
law areas – especially once the international consortia involved start complaining about being
confronted with different, potentially even contradictory licensing requirements coming from a
number of different Member States trying to assert authority for the sake of properly handling
international responsibility and liability – which they then have to take into consideration in their
contractual relations.

Conclusions

The next, final question arising from the above, consequently would be: what would be the impact
of these conclusions, focused as they are on the area of licensing, on the field of contracting,
whether between public entities and the private sector, or within the private sector as such?

Only in France, the contractual freedom of space industry participants was touched upon
directly in one particular area. The obligatory insurance for third-party liability under Article 6 of
the French Law on Space Operations has to include in its coverage ‘the operator and the persons
having taken part in the production of the space object or in the space operation’, effectively
a statutory boundary on how the various partners could handle such third-party liability claims
amongst themselves. As to inter-party liability, Articles 19 and 20 apply the cross-waiver as the
default standard.

50 Of course, of the six states discussed in the present contribution Norway is not an EU member,
leaving only five out of 27 current EU Member States with a national framework space law.
51 Emphasis added.
52 Cf. Art. 19, French Law on Space Operations, which provides: ‘persons having taken part in the space
operation or in the production of the space object … cannot be held liable by another of these persons, except
in case of a wilful misconduct’, although in some cases parties are allowed to expressly deviate from such a
cross-waiver.
With the above exception of France, no references to such a cross-waiver of liability between contractual partners is called for; and also beyond that cross-waiver the freedom to contract is certainly left intact by these national space laws.\(^{53}\)

Still, in the context of contracts between national public entities (such as national space agencies) and private companies, several aspects of the national framework law and the licensing regimes will be taken very much into consideration. The most obvious example is the aforementioned one of liability, where in the absence of cross-waiver obligations other than in France and depending upon the liability reimbursement requirements provided for by the national law respectively the individual licence, the contractual partners will have to negotiate how to deal with those amongst themselves and/or with the involvement of the insurance industry.

At the ‘head’ of each contractual chain in Europe relating to space and space activities in each case is either a public space agency (whether ESA or a national space agency) or a private company or consortium. For company-to-company contracts drafted in the latter context, because of any licence itself required by the company at the head of the chain, obviously such elements will be flowed down as appropriate. To the extent that company-to-company contracts are concluded further down a chain headed by such a public agency-prime contractor relationship, ultimately the same will apply: in this case, the public agency will be required in contracting with private sector parties to ensure that relevant rules and obligations otherwise to be imposed through the licence will now be flowed down through the prime contract. And when it comes to any disputes, at the least companies may expect national authorities having enunciated national space laws to apply their respective jurisdiction to contracts along the same lines as defined ratione materiae and ratione personae by those laws, even if (of necessity) applying general systems of administrative law rather than a specific system of dispute settlement offered by the national space law. So, even if contractual freedom is, as such, hardly touched upon by the European national space laws discussed, if a certain activity under the national space law requires a licence, in subcontracting for (part of) that particular activity, inevitably the contractual partners will have to take the main elements of the law and the licence into consideration – whatever they might be in any specific given context and/or legal framework.

List of References


\(^{53}\) In contrast, for example, to the United States, where the Commercial Space Launch Act provides for an obligatory cross-waiver of liability to be included in launch contracts; see Sec. 70112(b)(1), Commercial Space Transportation – Commercial Space Launch Activities, 49 U.S.C. 70101 (1994).


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