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FACING UP TO THIRD PARTY LIABILITY FOR SPACE ACTIVITIES: SOME REFLECTIONS

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ABSTRACT

This paper looks at third party liability (TPL) in space law from a systematic perspective. It analyses the rules governing compensation for damage to third parties resulting from space activities under the international law of space and under select national liability regimes. While the liability mechanism under the Liability Convention is designed to cover TPL, it remains a less attractive mechanism of recourse for victims, who are more likely to pursue damage actions before national courts, especially in the case of commercial space operations.

The paper discusses possible trends for commercial operations in a field where liability disclaimers, cross-waivers of liability and government liability guarantees are the order of the day. It looks to compliance with safety and debris mitigation rules as a measure of damage mitigation, particularly where damage occurs in orbit and fault must be substantiated. Finally, using the example of the Galileo commercial GNSS system, the author examines the complexities of satellite navigation systems that could lead to large-scale third party damage. While there are arguments for consistent international and national levels of damage regulation, the paper recalls that TPL currently remains an issue that turns largely on the availability and nature of insurance coverage.

Introduction

As the recent Russian Cosmos collision with the commercial Iridium satellite in early February 2009 shows, the relatively low occurrence of third party claims for damage resulting from space operations does not detract from their significance. Damage, irrespective of where it occurs, is generally likely to include third party loss. Whether this be the result of direct collision, collision debris, ground control interference with nearby satellites, or another scenario, TPL stands to increase in the near future, given the greater amount of debris and number of satellites operating alone in LEO.

DEFINING THIRD PARTY LIABILITY (TPL)

TPL generally denotes a duty in law to compensate for damage to property and persons beyond those interests falling within the scope of the risk. 'Third party' indicates that there are no contractual relations

between the parties involved in the damaging event that leads to liability. Although not directly exposed to the event leading to the actual damage, third parties still fall within the group to which a legal duty of care is owed.¹ While third party liability issues may also arise under the scope of interests covered by law of contract, TPL issues are generally based on the law of tort. Where TPL relates to pure economic or 'consequential' loss, courts may not, in the absence of contractual duties, be favourable to imposing liability for full loss on the basis of tort duties alone.² In other words, there may be occasions where indirect harm is not seen to fall within the immediate scope of the original harm-inflicting event, leading to a lack of compensation.

In the space world, damage may take place on the ground, to aircraft in flight or in Outer space. Third parties are those not involved in space operations and not otherwise connected in any way along the procurement chain of subcontractors or suppliers to the project. Space activities, not unlike environmental pollution, may lead to cross border harm, opening up issues relating to the competent forum and rules of applicable law.³ In the launch scenario, TPL encompasses those not immediately involved in the launch-

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¹ A breach of legal obligation may lead to a duty to reparate by virtue of national and international law, see Article 31 of the International Law Commission's Articles on the Responsibility of States for Internationally Wrongful Acts (hereinafter ILC Articles on Responsibility of States).

These rules were adopted by the UN GA in 2001 and commended to States in GA Resolution 59/35 of 2nd December 2004, A/Res/59/35. They constitute binding customary law and can be accessed via http://untreaty.un.org/ilc/texts/instruments/english/draft%20articles/9_6_2001.pdf.

² *Martin Marietta v. Intelsat*, 991 F. 2d 94 (4th Cir. 1992), abstract reprinted in *Journal of Space Law* vol. 19 (1991) 173-176.

³ For recent developments in the law of conflicts in Europe, see L.J. Smith/ C. Doldirina, *Jurisdiction and Applicable Law in Cases of Damage from Space in Europe – the Advent of the Most Suitable Choice – Rome II*, in: *Acta Astronautica*, Glasgow Special edition, 2009, *forthcoming*. Of the major space disasters that have occurred to date, few have resulted in damage beyond the national territory. The Cosmos 954 crash in 1978 is a notable exception.

ing but who may be at risk through indirect exposure (sufficiently proximate) to the launch operations. TPL may equally occur during subsequent in orbit operations as a result of collisions with space objects or space debris. The availability of third party liability insurance to cover loss resulting from launch failure or loss of control in orbit has gone far in treating this aspect of liability as a question of insurance law. However, its roots are in the law of international state liability and national space licensing and/or tort law. The increase in private commercial space activities means that the liability and particularly TPL of commercial operators requires greater consideration than where only states are participate in space operations. The latter may not want to carry international liability for damage from private space activities. It is important that there be some coherence between what is recoverable under national and international space law for third party damage.

Basis and Patterns of Liability

The past century has been witness to the development of special non-fault liability regimes designed to cater for accident and damage situations where the risk of loss – physical, material or immaterial – is inevitable or inherent – and where predominantly fault or negligence liability rules do not offer an adequate response to the inherent risks that accompany scientific and technical progress. Sector-specific international and national liability regimes were developed during the twentieth century to reflect an acceptable allocation of liability among those owners, manufacturers, aircraft flight and plant operators etc. involved in high risk operations.⁴ Civil liability for nuclear damage to third parties is an early example of a compensation regime devised on an international scale.⁵ Although there are two major schools of non-fault liability, i.e. absolute and strict liability, the former is the only true form of ‘pure’ liability. Strict liability systems may provide for a limited range of defences, whereas absolute liability knows no exception.⁶ One common

⁴ The Montreal Convention for the Unification of Certain Rules for International Carriage by Air 1999, available at <http://www.icao.int/icao/en/leb/mtl99.pdf> (last visited 15.08.09).

⁵ The Convention on Third Party Liability in the Field of Nuclear Energy 1960 (Paris Convention), available at http://www.nea.fr/html/law/nlparis_conv.html (last visited 15.08.09); Convention on Civil Liability for Nuclear damage (Vienna Convention) 1963, as amended, available at <http://www.iaea.org/Publications/Documents/Infcircs/1996/inf500.shtml> (last visited 15.08.09); Convention on Supplementary Compensation for Nuclear Damage 1997 (not yet in force), available at: http://www-pub.iaea.org/MTCD/publications/PDF/Pub1279_web.pdf (last visited 15.08.09).

⁶ Article VII Outer Space Treaty (OST) imposes absolute liability for damage caused by the space object of a launch-

example of the absolute and fault liability distinction is found in strict product liability regimes.⁷ Other strict civil liability regimes are known at international level and often implemented into national statutes for e.g. strict international liability for road or rail passenger accidents,⁸ for accidents and damage at sea⁹ or resulting from air transport accidents.¹⁰ International convention law has generally taken a clear line in offering the operator of the service in question a clear – and generally insurable or fund operated – limitation of liability in return for acceptance of strict liability.¹¹ Unlimited liability is, however, rarely known in either international convention or national law. It is, however, the basis on which international liability for space-related incidents is founded.

BASIS AND PATTERNS OF TPL IN SPACE LAW

The major space treaties dealing with liability – Article VII Outer Space Treaty (OST),¹² followed by the

ing state. In response to international convention law, many national laws also provide for absolute liability, particularly for passenger transport, see Conventions listed below.

⁷ Some product liability systems still allow the development risk defence to be plead, reducing the ultimate aim of strict liability, see Article 7(e) European Directive on approximation of laws governing liability for defective products, EC Dir. 1985/ 374/EEC OJ L 210 of 7.8.1985.

⁸ Convention Concerning International Carriage by Rail (COTIF), 1980, available at http://www.otif.org/fileadmin/user_upload/otif_verlinkte_files/07_veroeff/01_COTIF_80/COTIF-1980-ratifications_24.09.2008_fde.pdf (last visited 15.08.09); Convention on Contracts for International Carriage of Passengers and Luggage by Road (CVR), 1971, available at http://www.unece.org/trans/conventn/CVR_e.pdf (last visited 15.08.09).

⁹ Athens Convention relating to Carriage of Passengers at Sea, 1974 available at http://www.imo.org/Conventions/mainframe.asp?topic_id=256&doc_id=663 (last visited 15.08.09); further conventions exist relating to maritime cargo, available at http://www.imo.org/Conventions/mainframe.asp?topic_id=260 (last visited 15.08.09).

¹⁰ On the complex interaction of rules governing air carrier liability between the Montreal Convention for the Unification of Certain rules for the International Carriage by Air 1990 with the Rome Convention on Damage caused by Aircraft to Third Parties on the Surface, 1952, available at <http://www.icao.int/icao/en/leb/rome1952.pdf> (last visited 15.08.09), see L.J. Smith, *The Eye of the Storm: On the Case for Harmonising Principles of Damages as a remedy in Contract Law*, [2005] *European Contract Law Review (ECRL)* 227.

¹¹ Some international conventions such as the Montreal id., may contain mixed regimes of limited and unlimited liability.

¹² Treaty on Principles Governing the Activities of States in the exploration and use of Outer Space including the Moon and Other Celestial Bodies (Outer Space Treaty) (1967) 610 UNTS 205.

lex specialis of the Liability Convention (LIAB)¹³ – impose absolute liability for damage occurring on the earth (Article II LIAB) and fault liability for damage occurring in orbit (Article III LIAB). From the outset, space activities were recognised as inherently dangerous. This was reflected in the provisions of the Outer Space Treaty (OST) and taken up again in the LIAB.¹⁴ Article VII OST imposed the principle of absolute state liability for damage on earth caused by a launching state's space object.

Although liability towards victims of indirect damage was not directly referred to within these rules, it still falls within the general principles of international law of liability for space activities as governed by the OST and LIAB.¹⁵ The exclusions that are contained in the LIAB again relate to its international character: liability towards a state's own – as opposed to foreign – nationals is excluded by virtue of Article VII (a) LIAB and victims are left to pursue their claims at domestic level. More importantly, there is no requirement under Article XI (1) LIAB that claimants first exhaust their rights at national level before pursuing their cause through the medium of diplomatic channels. One additional limitation is that awards are only binding if parties have so agreed.

There are clear incentives for pursuing damage claims in cases involving TPL in front of a national tribunal. Private space operators must otherwise persuade their own governments to take up their cause via the international claims mechanism of LIAB which is subject to a one year limitation period.¹⁶ Pursuing a cause at national level before a national court may therefore be more practical.

There has been growing concern over the adequacy of fault-based in-orbit liability in the aftermath of the Iridium accident in early 2009.¹⁷ Up until this date, the focus had been placed on liability for damage on earth. Loss of the space object itself is but one aspect of resulting damage that may also lead to massive (physical, material and economic) damage occurring in orbit, with potential for further consequential loss on earth.¹⁸ Establishing fault for damage in orbit that leads to third party loss is a legal challenge. Some but

not all interests will be insured. The measure of fault for in orbit damage may lead to questions as to the legal duties incumbent on satellite operators in maintaining satellite orbit positioning, imposing legal duties of debris mitigation and indeed duties of debris remediation.¹⁹ A State's – and with it, its private entity's – failure to monitor or provide for debris control may be taken into account in establishing fault under general principles of law. A failure to act under national and international law may create a right to compensation and this principle applies equally in space law.²⁰ Going further, a satellite operator's failure to maintain accepted safety standards may be read as *prima facie* indication of fault. The doctrine of *res ipsa loquitur* is well established in international law.²¹ The requirement of maintaining debris mitigation standards in such jurisdictions as the United States of America (USA) and the United Kingdom (UK) may well go a long way in establishing state practice where this is already a licensing requirement.²²

Liability Insurance for Space Operations

Launch insurance is generally available alongside orbit insurance for space operations, albeit with certain limitations: firstly, insurance coverage is not unlimited in amount. Secondly, while TPL insurance exists, the insurance system itself relies heavily on waivers of recourse and hold harmless agreements already common to the industry.²³ Finally and perhaps the most complex issue of all, is the relevance of passage of time between manufacturing, launching and delivery of a satellite on the one hand, and the year in which the damaging incident takes place on the other. The event leading to damage may not coin-

¹³ Convention on International Liability for Damage caused by Space Objects (LIAB), (1972) 961 UNTS 187.

¹⁴ See Kerrest/ Smith, Article VII, in: Hobe/ Schmidt-Tedd/ Schrogl (eds), *Cologne Commentary on Space Law*, 2009, Cologne (Heymanns), Vol. I (*forthcoming*).

¹⁵ See D. Maniatis, The law governing liability for damage caused by space objects (1997) *XXII Annals of Air and Space Law*, 369 ff.

¹⁶ Article IX LIAB. Time runs under Article X (1) LIAB, either from the date of the damage or identification of the launching state,

¹⁷ For more details of the Iridium crash, see <http://www.space.com/news/090217-satellite-crash-future.html>. (last visited 15.08.09).

¹⁸ This applies in particular to communication satellites.

¹⁹ J. Foust, 'Putting a bounty on orbital debris', 27th July 2009, available at: <http://www.thespacereview.com/article/1427/1>; S. Hobe/ J. H. Mey, UN Space Debris Mitigation Guidelines (58) *Zeitschrift für Luft-u. Raumfahrtrecht, (ZLW) 3/2009*, 359 ff.

²⁰ See *Corfu Channel Case (United Kingdom v. Albania)*; *Merits*, International Court of Justice (ICJ), 9 April 1949, available at: <http://www.unhcr.org/refworld/docid/402399e62.html> (last visited 15.08.09); ILC Articles on Responsibility of States, n.3, above.

²¹ *id.*

²² For the UK situation, see Crowther/ Tremayne-Smith/ Martin, Implementing Space debris Mitigation within the UK's Outer Space Act, (2005), available at <http://articles.adsabs.harvard.edu/full/2005ESASP.587..577C/0000577.000.html> (last visited 15.08.09).

²³ The US Commercial Space Launches Act 1998 CSLA, (amended by the CSLAA 2004) operates on the presumption that risk limitation agreements exist between project partners. Courts will not, however, imply them in their absence, see *Martin Marietta v. Intelsat*, n. 2 above; further, I.H.Ph. Diederiks-Verschoor, *Introduction to Space Law*, 3rd ed., 2009, p. 156.

cide with the time the damage occurs.²⁴ Damage in space may first manifest itself many years after the impact or collision.

Space liability insurance operates on an 'occurrence' basis that is linked to annual insurance coverage. The insurance period may not correspond to the occurrence of an insured loss: in orbit damage (collision, loss of control etc) may take place years after the event to which it gave rise. This is a further factor to contend with when deciding which form of compensation procedure – be it at national or international level – should be followed. The insured party's liability towards third parties may be covered within an 'all risks' launch risk, or within the satellite 'in orbit insurance.'²⁵ While risk is at its greatest during the launch, the probability of damage occurring in orbit as a result of space debris, including satellite debris or from satellite impact is possibly even higher.²⁶

This has led to calls for clarification as to the type of liability regime required to cater for commercial liability for GNSS navigation signals, where no specific liability regime yet exists and where the basis of liability may be a complex mixture of signal failure, 'inevitable' risk or linked to either hard- or software defect. In the case of GNSS malfunctioning, damage could take place on earth or in orbit, but if in orbit, fault must be proven. Any third party liability claims must establish a legal basis in order to argue the case for civil liability.²⁷ While there is scope under national and international law to found a TPL claim, the ultimate choice is left to the damaged party. As indicated above, proceedings under national law may well be more convenient and faster than pursuing claims at international level under the LIAB. Where there is more than one defendant, national proceedings may even ensure easier enforcement in cases of joint & several liability against commercial operators than against States as provided by Article V LIAB, particularly in the absence of liability apportionment agreements between States.²⁸ This question will turn on the exact rules applicable to the damage.²⁹

²⁴ Sophie Moysan, The Insurance point of view, in: Towards a harmonised approach for national space legislation in Europe, *Project 2001 Plus* Workshop, Berlin 2004, available at www.uni-koeln.de/jur-fak/instluft/projectplus/moysan.ppt. (last accessed 15.08.09).

²⁵ These cover all risks including failure due to inherent defect.

²⁶ The number of satellites in Low Earth Orbit (LEO) alone is likely to exacerbate this situation, see K. U. Hoerl/ R. Jehn, C. Sarocco, LEO Constellations- Quo Vadis After End-of -Mission, in H. Saway-Lacoste (ed), *Proceedings of the 3rd European Conference on Space Debris*, Noordwijk, ESA Publications Division (2001).

²⁷ Article XI.1.LIAB.

²⁸ Article V.1.LIAB governs the position of joint tortfeasors. Under Article V.2., launching states may make appor-

TPL UNDER NATIONAL LAW

Of the most recent European countries to have passed national space legislation specifically addressing the down flow of liability onto the private operator, the French legislation is possibly the most significant.³⁰

The rationale behind France's commercial space legislation from 2008 has been, given its roles as a major European launching state, to ensure a right of recourse against private operators in the event of its international State liability.³¹ The French statute includes a provision on TPL that is backed by a government guarantee for losses above the amount stipulated during licensing.³²

Liability between space project participants is traditionally dealt with through extensive waivers and hold-harmless or indemnity agreements. Any third party claims will fall to be decided under operative rules of national law, in conjunction with international space law. It is not possible to predict to what extent a national court may take the issue of absolute or fault liability under international space law into account when reaching its decision on TPL. Individual space incidents may reveal gaps between insured risks and final damage that challenge traditional allocation of risks between space project partners. This is reason enough to address the issue of TPL in the field of GNSS in the forefront of further developments in such high risk areas as e.g. airline traffic management.³³

tionment agreements as to their respective legal obligations to bear compensation for liability.

²⁹ On the complexities in determining the applicable law under harmonised European rules, see Smith/Doldirina, n. 3 above.

³⁰ This is from a quantitative, not qualitative perspective. Belgium and Netherlands have both passed space laws, for Belgium, see Law on the Activities of Launching, Flight Operations and Guidance of Space Objects 2005; for Netherlands, Rules Concerning Space Activities and Establishment of Space Registry 2006.

³¹ France's key role as the major launching state within the Ariane programme has been a driving factor behind the statutory down-flow of international to national private liability for space operations, see further, M. Couston, La Loi française sur les Opérations Spatiales, (58) *Zeitschrift für Luft- u. Raumfahrtrecht, (ZLR)* 2/2009, 253-282. All European Union operators fall under the terms of the French statute. Down-flow of State liability is also provided in the Dutch and Belgian legislation.

³² Titre IV *Loi 2008-518 du 3 juin sur les Opérations Spatiales*, JO 04/06/09 p. 916. This guarantee is similar to the provision under US Code § 70113 (2) whereby the Secretary of Transport may cover uninsured third party losses at his discretion.

³³ See ICAO, Legal Committee 33rd. Session, May 2008, Model Framework Agreement on Implementation, Provision and Use of a Global Navigation Satellite System,

LIABILITY FOR GNSS SIGNAL FAILURE AND TPL

Over the years, the question of whether signal failure or satellite design defects causing failure can be the basis for a claim in liability under the space treaties has been the subject of some discussion.³⁴ The debate has centred on whether radio-magnetic waves fall within the definition of damage by or from a space object in terms of Article II LIAB. The assumption at the time of drafting the OST was that liability under Article VII OST arises through collision with a physical space object, as opposed to an electro-magnetic wave, although this too was mooted at the time.³⁵ However, there is no legal presumption that damage from incorrect radio signals leads to inapplicability of the treaty rules on liability. Nor are there any provisions in either the OST or the LIAB calling for a narrow interpretation of their terms.³⁶

There is, however, potential for third party loss arising from a defective GNSS system, given the spread of owners, operators, users and third parties who will become dependent or involved in its use as a daily navigation tool. Galileo's five differing services and particularly Safety of Life (SOL) and Search and Rescue (SAR),³⁷ alongside the guaranteed commercial service, rely on absolute integrity and accuracy of signal. GNSS failure may take place in outer space, but its effects be felt in air space or on earth. Other scenarios may lead to errors from signal receivers on earth and raise issues of manufacturer's and product liability. The distinction drawn in international space law between fault and absolute liability in relation to GNSS applications could lead to uncertainty and a lack of coherency between international and national (civil) law of liability for space activities. National law requires a legal basis on which to base any rule of liability and this has not yet been finally mapped out for GNSS.

Although the European Commission estimates the immediate risk of loss of life or damage from satellite error or failure as negligible,³⁸ there have been calls

LC33/-WP/4-8, 17/04/08; Eurocontrol, GNSS Sole Service, Feasibility Study, May 2003.

³⁴ For a full treatment of GNSS space law, see F. Lyall & P.B. Larsen, *Space Law, a Treatise*, 2009, 402-409.

³⁵ Kerrest/ Smith, *Cologne Commentary*, n. 14, above.

³⁶ Arts. 30-32 Vienna Convention on the Law of Treaties, 1969, available at http://untreaty.un.org/ilc/texts/instruments/english/conventions/1_1_1969.pdf (last visited 15.08.09).

³⁷ Annex, EC Reg. 683/2008 lists the following services: Open Service (OS), Public Regulated Services (PRS), Commercial Service (CS), Search and Rescue (SAR) to Safety of Life (SOL).

³⁸ See Commission Communication, *Progressing Galileo: Re-profiling the European GNSS Programmes COM (2007) 534 final*, 11.

to introduce an international liability regime for damage resulting from GNSS.³⁹ Firstly, in the absence of an international liability regime, there may easily be differing views as to the grounds of liability for signal loss or failure. Leaving aside issues relating to choice of jurisdiction, applicable law and lack of a unified liability regime, this could lead to varying outcomes for victims of one accident. For example, the open signal service is to be free of charge: the cost-free navigation tool may in law lead to exculpation of providers and operators from any legal duty of care towards the victims in some but not other systems. Secondly, satellite navigation failure may lead to direct and indirect damage, including third party loss that may not be covered by insurance. Further, not all risks in society impose a duty to provide compensation: in many cases, the loss is deemed to lie where it falls – *casum sentit dominus*.⁴⁰ Lack of regulation and uncertainty as to whether victims can be compensated runs counter to legal progress and the rich history of international space law calls for an appropriate solution.⁴¹

While the mass liability scenario often depicted in discussions does not answer the question as to which legal basis should be chosen for liability, signal failure, defect or loss of operational contact leading to major disaster is an undesirable outcome from a policy perspective. Beyond this, the most salient reason for creating a liability regime is to clarify the rules applicable at international and at national level in the event of an incident. One of the issues currently debated is whether a signal failure falls within European product liability rules.⁴² More importantly, however, the provisions of the EC Product Liability Directive are inapplicable against the Community.⁴³ This would lead to a clear rejection of claims for compensation for damage resulting from defective satellite navigation systems in Europe. All this adds weight to the

³⁹ H.-G. Bollweg, Initial Considerations regarding the feasibility of a Liability system as an International UN-IDROIT Instrument for Damage caused by malfunction in Global (Navigation) Systems, *Uniform Law Review* (Unif. L. Rev). 2008, 1-21.

⁴⁰ In some cases, the damaging incident may not even constitute a claim in law - *casus a nullo praestatur*.

⁴¹ See ESPI Policy Report on Aspects of TPL in satellite Navigation, May 2009, available at http://www.espi.or.at/index.php?option=com_content&task=view&id=393&Itemid=1 (last visited 15.08.09).

⁴² Electricity is a useful analogy when considering the situation of non-tangible satellite signals as an integral part of the satellite for product liability purposes. Electricity is specifically included within the EC Product Liability Directive.

⁴³ In EU law, the Community is only immune from action if the relevant legislation so specifies.

call for an appropriate compensation scheme for satellite induced damage, particularly to third parties.

Institutional characteristics of Galileo

The cost of failing to introduce an appropriate liability scheme for Galileo GNSS might ultimately be greater than addressing it directly: Galileo is Europe's most prestigious and political project over the past decade. There are significant constitutional aspects of the Galileo system that make the introduction of a European liability scheme a pressing issue. Firstly, as a supra-national organisation *sui generis*, the EU is not a signatory state to the Outer Space Treaty or Liability Convention and in the forefront of the Lisbon Treaty does not yet have clear supranational space competence to act alone in this area.⁴⁴ Secondly and more relevant, the European Community is the owner of the Galileo system.⁴⁵ Under traditional rules of system and product liability law, the EC as owner could face claims for damages in the event of a failure that leads to damage. Finally, the foregoing highlights the need to develop a clear liability regime for the EC to support its satellite navigation operations. This might give impetus to an international convention at a later stage.

Galileo's Revised Structure

Galileo was originally conceived as a public-private partnership with the Galileo Supervisory Authority (GSA) acting as its public supervisory and licensing agency under Regulation 1321/2004.⁴⁶ Re-organisation between 2006 and 2007 lead to a revised governance and budgetary structure that is now contained in Regulation 638/2008.⁴⁷ Under the 2008 rules, the GSA acts as a selection and accreditation authority for the GNSS operator and becomes responsible for certification of all services and providers. Ownership is accompanied by concomitant legal duties that include rules governing the Community's non-contractual liability.

LIABILITY IN EUROPEAN COMMUNITY LAW

The provisions of Articles 288(1) and 288(2) EC Treaty govern the contractual and extra-contractual (i.e. tort or quasi-contractual) liability of the EC insti-

tutions under EU law. In the context of GNSS, these provisions are mirrored in Article 17 Regulation 1321/2004.⁴⁸

The circumstances under which the EC or the GSA is likely to be held liable for any GNSS-related injury are, however, limited. Firstly, the GSA is responsible for selecting and accrediting the Galileo services operator. Secondly, case law on liability relates to damage resulting from administrative failure rather than compensation for accidents caused by malfunction of satellite operations. Liability under Community law for Galileo has been previously commented upon in detail in earlier *Proceedings*.⁴⁹ While failure to prevent damage could constitute a basis of action in law against the Community through its failure to uphold primary Treaty obligations, relying on this form of negligence action as a sole basis for a liability the claim would fall far short of establishing a secure liability regime for GNSS that also covers TPL.⁵⁰

Unlike the Space Treaties, the European Community Treaty rules were not developed with inherently dangerous activities in mind. The European Court of Justice consistently measures liability on the basis of the principles of liability common to Member States' legal systems.⁵¹ This implies that there would be no recourse against the GSA for injury occurring through its operations, unless there has been some form of negligence, reckless or substandard activity. In short, the absence of a unifying satellite navigation liability scheme could lead to a major split in the outcomes between non-contractual liability at EC level and potential GNSS operator liability at national level. There would be a knock-on effect on liability towards third parties. The precise conditions for imposing TPL would remain unclear and be left to decide on the basis of the availability and coverage by insurance only.⁵²

⁴⁴ Article 189 Lisbon Treaty confers new space-related competences.

⁴⁵ Article 8 Reg. 638/ 2008 of 9 July 2008 on the further implementation of the European satellite navigation programmes (EGNOS and Galileo), OJ L 196/1 of 24.7.2009.

⁴⁶ Council Regulation 1321/ 2004 of 12th July 2004 on the establishment of structures for the management of European Satellite radio-navigation programmes, establishing the GNSS, OJ L 246/1 of 20.7. 2004, as amended by Reg. 1942/2006.

⁴⁷ Council Regulation 638/2008, id.

⁴⁸ id. n.46, above.

⁴⁹ See L.J. Smith, Where's Paradise: The EU's Navigation System- Some Comments on Inherent Risk in: *Proceedings of the 49th Colloquium on the Law of Outer Space (2007)*, 346-357.

⁵⁰ Case 145/83 *Adams v European Commission* 1985 ECR 3539; L.J. Smith, Where's Paradise, n. 49 above.

⁵¹ See L.J. Smith, The Eye of the Storm: On the Case for Harmonising Principles of Damages as a remedy in Contract Law, [2005] ECRL 227.

⁵² Cf. *Martin Marietta v Intelsat*, n. 2, above.

OUTLOOK:PERSPECTIVES FOR STRICT LIABILITY AND TPL UNDER
COMMUNITY LAW

Certain initiatives over the past three years have provided some impetus for the Community to address liability for GNSS, a process in which UNIDROIT has also been involved.⁵³ The European Commission moved forward in early summer 2009 to set up a working group on liability to discuss the further way forward in creating a Community-own system of liability for Galileo GNSS.⁵⁴ It is therefore expected that Europe will prepare a regulation governing liability issues, including TPL. Moving forward from this first step towards an international convention governing liability will then be easier. A European regulation will offer legal certainty for damaged victims and put an end to conjecture as to which rules of liability law apply. It is likely to impose a strict liability regime for Galileo-based satellite navigation accidents occurring within Europe to users, passengers and third parties of the European GNSS system. In keeping with other liability regimes such as air law, the liability will undoubtedly be limited.⁵⁵ This European model can thereafter be transposed to international level in effort of a draft Convention.⁵⁶

A European response, even if designed for Europe's own GNSS, will remove uncertainties as to the plea of sovereign immunity. It will also go a long way in settling open question as to third party liability issues deriving from malfunction of satellite navigation systems. In this respect, European, national and international space law will be seen to be keeping pace with technological change by providing a victim-orientated compensation in the spirit and sense of LIAB.

⁵³ An Italian-led initiative presented a first Draft regulation to the Commission, Proposed Regulation on Civil Liability and Compensation for damage resulting from the Malfunctioning of European GNSS Services and Equipment, 2006.

⁵⁴ European Commission, Working Document, 'Global Satellite Systems (GNSS) Extra Contractual Liability', 24 June 2009, EGPC-09-07-06-02.

⁵⁵ Montreal Convention, n. 4 above.

⁵⁶ See information available on ESPI website, n. 41 above.

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