
INTERNATIONAL LEGAL REFERENCES FOR GPS

INTERNATIONAL AGREEMENTS RELATED TO NAVIGATION AND GPS

The United States currently¹ has already made at least fifteen international agreements (other than treaties) that refer to global positioning, GPS, or NAVSTAR. None of these agreements seem to involve DGPS. The agreements cover diverse topics and fall into five categories:

1. *Basic exchange and cooperative agreements with Defense Mapping Agency* involving topographic mapping; nautical and aeronautical charting and information; geodesy and geophysics; digital data; and related mapping, charting, and geodesy materials in cooperation with the U.S. DoD's Defense Mapping Agency.

Nicaragua (entered into force December 1, 1994. State Dept. No. 95-13)

Albania (entered into force March 25, 1994. State Dept. No. 94-120, KAV No. 3834)

Lithuania (entered into force February 15, 1994. State Dept. No. 94-78, KAV No. 3792)

Estonia (entered into force December 7, 1993. State Dept. No. 94-13, KAV No. 3729)

Latvia (Entered into force August 24, 1993. State Dept. No. 93-172, KAV No. 3662)

Hellenic Republic (entered into force May 25, 1993. State Dept. No. 93-114, KAV No. 3573)

Spain (entered into force June 29, 1992. State Dept. No. 92-176, KAV No. 3354)

¹As of March 1, 1995.

Czech and Slovak Federal Republic (entered into force December 10, 1991. State Dept. No. 92-14, KAV No. 3122)

Norway (entered into force November 22, 1985. T.I.A.S. No. 11216)

2. *Basic exchange and cooperative agreements with DoD* involving military topographic mapping, nautical and aeronautical charting, geodesy and geophysics, digital data, and related MC&G materials in cooperation with the U.S. Department of Defense.

Hungary (entered into force December 9, 1991. State Dept. No. 92-13, KAV No. 3121)

Poland (entered into force November 10, 1991. State Dept. No. 92-254, KAV No. 3430)

3. *Agreement regarding installation, operation and maintenance of Global Sea Level Data Collection (GSL) Stations.*

New Zealand (entered into force November 18, 1992. State Dept. No. 93-2, T.I.A.S. No. 11973, KAV No. 3450)

4. *Memorandum of understanding* covering a cooperative program for harmonization, development, production, and support of a maritime patrol aircraft and the MPA-90 Program.

Federal Republic of Germany (entered into force April 5, 1989. State Dept. No. 89-129, KAV No. 689)

5. *Memoranda of agreement* specifically concerning the NAVSTAR Global Positioning System.

New Zealand (entered into force September 2, 1994. State Dept. No. 94-223, KAV No. 4015)

Australia (entered into force February 7, 1991. State Dept. No. 91-77, KAV No. 2856)

EUROPEAN POLICY ACTIVITIES RELATED TO SATELLITE NAVIGATION

In addition to public safety, the European Commission (EC) seeks ways to make its airline manufacturing and services industries competitive. Thus most EC documents related to satellite navigation are couched in terms of their potential

benefits to the domestic aircraft manufacturers and service industries (see selected quotes below).

Recent EC Documents

Commission of the European Communities

Publication Date: December 31, 1994, 1994 OJ L 361

Document Date: December 15, 1994, 94/914/EC

Council Decision of 15 December 1994 adopting a specific program for research and technological development, including demonstration in the field of transport (1994 to 1998).

Selected quotes:

Whereas, by Decision No 1110/94/EC (4), the European Parliament and the Council adopted a fourth framework program for Community activities in the field of research, technological development and demonstration (RTD) for the period 1994 to 1998 specifying inter alia the activities to be carried out in the area of transport; whereas this Decision takes account of the grounds set out in the preamble to that Decision; . . .

A specific program for research and technological development, including demonstration, in the field of transport, as set out in Annex I, is hereby adopted for the period from the date of adoption of this Decision to 31 December 1998...

Article 2

1. The amount deemed necessary for carrying out the program is ECU 240 million, including a maximum of 8,3% for the Commission's staff and administrative expenditure.
2. An indicative breakdown of this amount is given in Annex II.

Commission of the European Communities

Publication Date: November 5, 1994, 1994 OJ C 309

Document Date: October 24, 1994

Council Resolution of 24 October 1994 on the situation in European civil aviation

Commission of the European Communities,

Publication Date: July 29, 1993, 1993 OJ L 187

Document Date: July 19, 1993, 93/65/EEC

Council Directive 93/65/EEC of 19 July 1993 on the definition and use of compatible technical specifications for the procurement of air-traffic-management equipment and systems.

Older EC Documents on Air Traffic Control

Commission of the European Communities

Publication Date: November 12, 1984, 1984 OJ C 300

Document Date: October 11, 1984

Resolution on Eurocontrol

Commission of the European Communities

Publication Date: May 14, 1984, 1984 OJ C 127

Document Date: April 13, 1984

Resolution on the safety of air transport in Europe

Commission of the European Communities

Publication Date: May 16, 1983, 1983 OJ C 128

Document Date: April 14, 1983

Resolution on the Eurocontrol air traffic control center in Maastricht

Commission of the European Communities

Publication Date: July 19, 1982, 1982 OJ C 182

Document Date: June 16, 1982

Resolution on improvement of the European system of air traffic control

Commission of the European Communities

Publication Date: December 15, 1980, 1980 OJ C 327

Document Date: November 19, 1980

Resolution on the future of Eurocontrol

Commission of the European Communities

Publication Date: August 4, 1980, 1980 OJ C 197

Document Date: July 10, 1980

Resolution on the development of a coordinated European air traffic control system

INTERNATIONAL AIR NAVIGATION AGREEMENTS

The United States may want to make individual agreements with its major trading partners and allies that address GPS-related issues such as system availability, reliability, emergency procedures, liability, and mutual benefits. In reaching agreements regarding air navigation, the Secretary of Transportation and the Administrator of the FAA “shall act consistently with obligations of the United States Government under an international agreement” and “shall consider applicable laws and requirements of a foreign country.”² We suggest here an approach to the aircraft/airways/airport navigation problem, rather than the merchant marine/sea lanes/harbor navigation problem, and introduce some of the pertinent domestic law of the United Kingdom as an example for preparing to negotiate with a specific country.

International Civil Aviation Organization (ICAO)

Members of the ICAO are free to bargain with other members for the provision of aids to navigation (i.e., the Chicago Convention 1944 is neutral on the question). Provision of air navigation facilities and services is the duty of the Contracting States within the limited range set forth in Article 28(a) of the Chicago Convention. Each signatory undertakes, so far “as it may find practicable,” to provide in its territory radio services, meteorological services, and other air navigation facilities for international air navigation.³ In 1987 a commentator on the work of the Future Air Navigation Systems (FANS) com-

²49 U.S.C. § 40105(b)(1)(A)–(B). For the steps in making an executive agreement, see Congressional Research Service, *Treaties and Other International Agreements: The Role of the United States Senate*, S.Prt. 103-53, 1993, at xxi.

³Michael Milde, “Legal Aspects of Future Air Navigation Systems,” 12 *Annals of Air and Space Law* 1987, 87–98, at 92.

mittee of the ICAO asserted that “nothing legally prevents several States from entering into arrangements or agreements under which one of the States or an entity created by the States or designated by them would provide certain aeronautical facilities and services to the collectivity of States concerned.”⁴

Some national governments have crafted agreements regarding navigation aids that are not entirely under their sovereign control but rely to some extent on the cooperation of other countries. Examples of cooperative provision of navigation aids include: Denmark/Iceland joint financing agreements (DEN/ICE); Africa/Madagascar Agency for Air Navigation Safety (ASECNA); Central American Air Navigation Services Corporation (COCESNA); and Societe internationale de telecommunications aeronautiques (SITA).⁵

United States

Several kinds of U.S. agreements and treaties with major trading partner nations relating to commerce and navigation⁶ may serve as models for understanding GPS and DGPS. Their titles suggest that civil aviation has been an arena of cooperation and exchange for many years.

Individual agreements related to navigation, often one of the first formal agreements entered into by the United States and other nations, have been largely supplanted by larger multilateral agreements in trade and commerce since WW II. This trend lessens duplication of effort and promotes uniform global practices. Global multilateral agreements have not been the rule in national security, however, where attention has focused on bilateral relations (e.g., U.S.-Soviet arms control) and regional security (e.g., NATO).

Some U.S. agreements are listed below:

Canada

Treaty of amity, commerce, and navigation (Jay Treaty) (1795). 8 Stat. 16.

Agreement concerning air traffic control (1963). 14 UST 1737, TIAS 5480.

Several agreements re Loran and Omega stations.

⁴Id. at 95.

⁵Id. at 96. Other organizations are ARINC, COSPAS/SARSAT, INMARSAT, and EUROCONTROL.

⁶U.S. Department of State, *Treaties in Force*, January 1, 1994.

United Kingdom

Treaty of amity, commerce, and navigation (Jay Treaty) (1795).

Memorandum of agreement concerning the provision of equipment and services for the development of civil aeronautics (1982). TIAS 10874.

France

Convention of navigation and commerce (1822). 8 Stat. 278, TS 87.

Agreement concerning air services facilities (1946). TIAS 1852.

Agreement concerning research and development of civil aviation (1980). 32 UST 2873, TIAS 9881, 1274 UNTS 201.

Memorandum of understanding concerning operation and maintenance of Omega station La Reunion (1981). 33 UST 2109, TIAS 10176.

Germany

Treaty of friendship, commerce, and navigation with protocol and exchanges of notes (1956). 7 UST 1839, TIAS 3593, 273 UNTS 3.

Memorandum of understanding relating to cooperation in the development of national air-space systems, with annex (1984). TIAS 11025.

Memorandum of understanding concerning air navigation services in Berlin, with related exchange of letters (1990). TIAS 11746.

Italy

Treaty of friendship, commerce, and navigation (1949). 63 Stat. 2255, TIAS 1965.

Six aviation agreements.

Memorandum of understanding concerning the installation and management of U.S. navigation aids (1985). TIAS 11191.

Japan

Treaty of friendship, commerce, and navigation (1953). 4 UST 2063, TIAS 2863, 206 UNTS 143.

Agreement relating to the establishment, operation, and maintenance of an Omega navigation aid station in Japan (1972). 23 UST 1480, TIAS 7428, 898 UNTS 55.

Implementing arrangement on cooperation in the field of national air traffic control service system, with annex (1985). TIAS 11141.

The Secretaries of State, Transportation, and Commerce, and the Administrator of the FAA have statutory authority to conduct “negotiations for an agreement with a government of a foreign country to establish or develop air navigation, including air routes and services.”⁷

The Secretary of Transportation, subject to the concurrence of the Secretary of State and the consideration of objectives of the International Civil Aviation Organization, has the statutory authority to acquire, establish, and construct airport property and airway property (except meteorological facilities) in foreign territory.⁸ A DGPS facility might qualify as “airport property.”⁹ And, although international agreements usually do not entail an exchange of funds, the Secretary of Transportation may accept payment from a government of a foreign country or international organization for facilities or services sold or provided the government or organization under this chapter.¹⁰ An example of this kind of agreement is the Memorandum between the FAA and the UK Civil Aviation Authority, in which provision is made for the FAA and the CAA to furnish to the other equipment and services which the other has funds available for and has determined should be obtained from that source (see below).¹¹

United Kingdom

The legal situation in the United Kingdom may be considered illustrative of the situation for other European states. The Civil Aviation Act of 1982 assigns the CAA the statutory duty to provide air navigation services in the United

⁷49 U.S.C. § 40105(a). The FAA is further authorized to furnish equipment and services to particular countries by the Agency for International Development. Foreign Assistance Act 1961, 82 Stat. 963; 22 U.S.C. § 2357(a).

⁸49 U.S.C. § 47302 (“Providing airport and airway property in foreign territories”) para. (a)(1). (The Secretary of Commerce may acquire, establish, and construct meteorological facilities in foreign territory, para (a)(2).)

⁹49 § 47301.

¹⁰Chapter 473—International Airport Facilities. The amount received may be credited to the appropriation current when the expenditures are or were paid, the appropriation current when the amount is received, or both. 49 U.S.C. § 47302(c).

¹¹Equipment includes hardware (i.e., computer, radar, communications), software, material, and parts; services include information and personnel. Specific programs are to be described in Annexes to the general Agreement. NAT-I-1223, TIAS 10874; amended and extended Sept 12 and Oct 22, 1984 (TIAS 11405), and Mar 25 and Apr 15, 1986 (TIAS 11405).

Kingdom. This duty is proscribed by the extent to which it appears that such services are necessary and are not being provided by the CAA (either alone or jointly with another person) or by some other person.¹² Radionavigation aids in other European countries are likewise operated by a national agency.¹³

By these terms, GPS is a service that is being provided by some other person (which can be a foreign government), and thus the CAA may choose to allow GPS to be used in the United Kingdom and to not provide a redundant system. The Secretary of State of the United Kingdom may make regulations requiring the payment to any government outside the United Kingdom of charges for air navigation services provided by that government in pursuance of an agreement to which the United Kingdom is a party.¹⁴ The CAA may undertake to provide air navigation services outside the United Kingdom, in pursuance of an international arrangement.¹⁵ Thus it seems possible for the United Kingdom to establish DGPS sites for another country in the other country's territory.

Liability concerns are sometimes cited as reasons to assign navigation services to governments due to their supposed immunity to potential lawsuits. In the case of the United Kingdom, however, absolute domestic sovereign immunity ended with the Crown Proceedings Act of 1947.¹⁶ The government is liable under ordinary rules of tort law, but public authorities may be authorized by legislation to perform acts that would otherwise give rise to liability.¹⁷ Other G-7 countries have similar situations.¹⁸

If the United Kingdom were to seek an agreement with the United States on the use of GPS for air navigation, the CAA would have the statutory authority to: (1) accept GPS as an aid to air navigation; (2) make regulations requiring payment for GPS as an air navigation service; and (3) provide DGPS facilities outside the United Kingdom, pursuant to an international arrangement.¹⁹

¹²Civil Aviation Act 1982 § 72(1)(a). Reprinted in 4 Halsbury's Stat. at 190 (1991).

¹³Deutsche Aerospace, *Report on Assessment of Satnav Systems*, January 31, 1994, p. 9.

¹⁴Civil Aviation Act 1982 § 73(1)(b). Reprinted in 4 Halsbury's Stat. at 190 (1991).

¹⁵Civil Aviation Act 1982 § 72(1)(b). Reprinted in 4 Halsbury's Stat. at 190 (1991).

¹⁶10 & 11 Geo. 6, ch. 44 (1947); 13 Halsbury's Stat. 9 (4th ed. 1991). The State Immunity Act 1978 is the U.K. statute for foreign sovereign (limited) immunity, and it is similar to the U.S. Foreign Sovereign Immunity Act (FSIA) (28 U.S.C. §§ 1330, 1332(a), 1391(f), 1441(d), 1602-1611 (1988)), according to Joseph W. Dellapenna, "Foreign State Immunity in Europe," 5 *N.Y. Int'l L. Rev.* 51, 1992.

¹⁷ Dellapenna, 1992; John Bell, "The Government Liability Law of England and Wales," in John Bell, and Anthony W. Bradley, *Government Liability: A Comparative Study*, United Kingdom National Committee of Comparative Law, 1991, pp. 17-44.

¹⁸Götz Eike zur Hausen, "Non-contractual Liability Under European Community Law," in Bell, and Bradley, 1991, pp. 275-290.

¹⁹Based on the 1991 edition (4th) of Halsbury's Statutes.

Existing agreements between the United Kingdom and the United States could provide additional assurances to the United Kingdom if it should choose to rely on GPS. These agreements include the use of overseas sites and exchanges of personnel that could be useful to GPS operations, such as:

Ascension Island

Agreement providing for the establishment of a lunar and planetary spacecraft tracking facility on Ascension Island (1965). 16 UST 1183, TIAS 5864, 551 UNTS 221.

Agreement relating to the expanded use of Ascension Island (1973). 24 UST 918, TIAS 7602.

Agreement relating to sharing facility construction costs on Ascension Island, with memoranda of agreement (1985). Consolidated Treaties and International Agreement (CTIA) No. 6209.000, London.

Diego Garcia

Agreement concerning a United States naval support facility on Diego Garcia, British Indian Ocean Territory, with plan, related notes, and supplementary arrangement (1976). 27 UST 315, TIAS 8230, 1018 UNTS 372.

U.S. Coast Guard

Memorandum of agreement on the exchange of personnel between the United States Coast Guard and the Royal Navy (1980). 32 UST 2403, TIAS 9849, 1267 UNTS 187.

Memorandum of agreement on the exchange of personnel between the United States Coast Guard and the Royal Air Force (1983). TIAS 10908.

SOVEREIGN LIABILITY RULES IN G-7 COUNTRIES

The subject of domestic sovereign immunity is not discussed or written about as frequently as foreign sovereign immunity is, but a particular state's approaches to foreign state immunity reflect its attitudes toward its own immunity to litigation.²⁰ Ironically, the immunity of sovereigns in common-law countries today is determined by a statute that purportedly codifies the whole law on the topic. In civil-law countries (e.g., France and Germany), sovereign immunity largely remains (as it nearly always has been in the civil-law tradition) a judicial construct discoverable only from a study of the jurisprudence of the

²⁰Dellapenna, 1992.

relevant courts.²¹ Immunity and liability in several countries are summarized here.

France

The scope of immunity from noncontractual liability is very restricted. Apparently only in the conduct of foreign affairs does the State have any real immunity from suit in national courts. But when an international agreement has been incorporated into domestic law, it may be possible for a statute to exclude noncontractual liability.²²

Germany

“The idea that there could be any state activity which may not be challenged in court is alien to German law.”²³ Thus, the question of liability is not a barrier to negotiating or not negotiating an international agreement regarding GPS or DGPS.

Italy

The basis of the liability of public authorities is the same as the liability of private individuals. However, the discretionary power of a public authority is given (and limited) by statute or regulation.²⁴

Japan

The situation in Japan is similar to that in Germany, where there is no immunity. According to a recent analysis of product liability law in Japan, much of Japan’s civil and criminal codes are patterned after German legal codes:

[T]he Japanese system does not recognize the notion of sovereign immunity and allows an injured party to sue the appropriate government ministry for breaching its duty to protect the public from a defective product. The Japanese government has been sued for negligence in defective design, manufacture, and warning cases for their failure to properly supervise the offending product or

²¹Id. note 84 and accompanying text.

²²Dellapenna, 1992; Marie-Aimée de Latournerie, “The Government Liability Law of France,” in Bell and Bradley, 1991, pp. 200–227.

²³Wolfgang Ruffner, “Basic Elements of German Law on State Liability,” in Bell and Bradley, 1991, pp. 249–274.

²⁴Marcello Clarich, “The Liability of Public Authorities in Italian Law,” in Bell and Bradley, 1991, pp. 228–248.

industry. Japanese law adds the government as another potential defendant who injured plaintiffs may sue for compensation in product defect cases to address cause-in-fact issues.²⁵

Obviously, a look at existing international agreements may reveal clues to the risks the government is willing to take.

²⁵Lucille M. Ponte, "Guilt by Association in United States Products Liability Cases: Are the European Community and Japan Likely to Develop Similar Cause-in-Fact Approaches to Defendant Identification?" 15 *Loyola Int'l & Comp.L.J.* 1993, 629, text at fn 213, 214, 215. Her sources: Kohji Tanabe, "The Process of Litigation: An Experiment with the Adversary System," in A. von Mehren, ed., *Law in Japan: The Legal Order in a Changing Society* 73-74; Younghee Jin Ottley and Bruce L. Ottley, "Product Liability Law in Japan: An Introduction to a Developing Area of Law," 14 *Ga.J.Int'l Comp.L.* 29, 32 (1984); Richard B. Parker, "Law, Language, and the Individual in Japan and the United States," 7 *Wisc.Int'l L.J.* 179, 202 (1988); David Cohen and Karen Martin, "Western Ideology, Japanese Product Safety Regulation and International Trade," 19 *U.B.C.L.Rev.* 315, 324-25 (1985); John O. Haley, "Law and Society in Contemporary Japan: American Perspectives"; "Introduction: Legal v. Social Controls," 17 *Law in Japan* 1, 1-2 (1984); Kijuro Arita, "Products Liability Law of Japan," in L. Frumer & M. Friedman eds., 3A *Products Liability* §§ 59.01-59.04, 1991.