

Galileo – Legal Issues

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Galileo – Legal Issues

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CCG Seminar, Oberpfaffenhofen

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GNSS governance



- No global regulatory organisation
- ➔ No coherent, monolithic legal framework

↔ Individual operators GNSS

- So far states
 - ◆ Directly 'accountable' under international law
 - ◆ In Europe IGOs: EU & ESA
 - ◆ Possible involvement private operator Galileo (PPP)
- Largely determine 'their own' governance & legal framework

Galileo – Legal Issues

Galileo

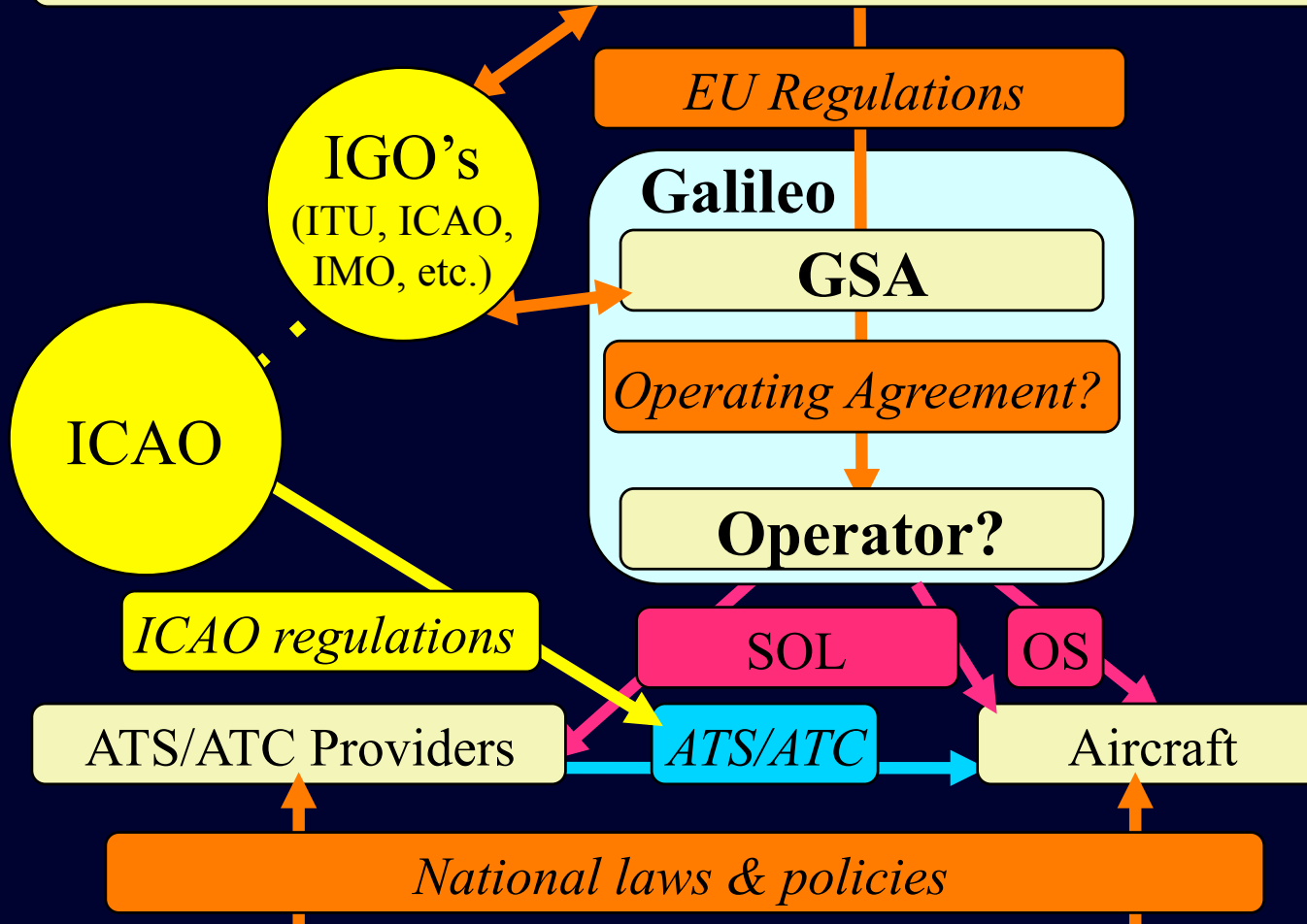


- Being developed under EC leadership
 - With ESA as developer & procuring agency
 - ◆ Satellite system & ground segments
 - ➔ Requires appropriate governance arrangements
- P.M.: Aim of FOC by 2013*
- Aims for services with fees, guarantees & integrity (CS, PRS & SOL)
 - ➔ Need for specific legal framework
 - Aims for international participation – & markets!
 - ➔ Requires international agreements

Galileo – Legal Issues

Galileo Legal / Functional Model & aviation

Galileo Public Authorities – EU & ESA States, Commission, Others?



Legend

EU = European Union
ESA = European Space Agency
IGO's = InterGovernmental Organisations
ITU = International Telecommunication Union
ICAO = International Civil Aviation Organisation
IMO = International Maritime Organisation
GSA = European GNSS Supervisory Authority
OS = Open Service
SOL = Safety-Of-Life Service
ATS = Air Traffic Services
ATC = Air Traffic Control

Non-Galileo Public Authorities (Third States)

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Reg. 683/2008 (1)



- Reg. 1321/2004 had created GSA
- ➔ Reg. 683/2008 further outlines EGNOS & Galileo governance
- On EGNOS:
 - Operation financed by EC (Art. 6(1))
 - Delegated by public service contracts (Art. 6(2))
 - ◆ Currently (only) ESSP
 - EC ensures compatibility also with conventional means of navigation, where possible (Art. 7(1))
 - EC owns all tangible & intangible assets (Art. 8)

Galileo – Legal Issues

Reg. 683/2008 (2)



- On Galileo:
 - Deployment financed by EC (Art. 4(2))
 - ◆ Procurement principles: open access & fair competition; '2/6' rule & '40%' rule (Art. 17(1) & (2))
 - Exploitation: PPP may be back on the table
 - ◆ Report 2010 on potential revenue-sharing mechanisms, service concession contracts & public service contracts (Art. 4(3))
 - Commission overall management (Art. 12(1))
 - ◆ GSA role in security accreditation & security centre; promotion commercialisation, applications & services; certification (Art. 16)

Reg. 683/2008 (3)



- Non-EU involvement:
 - Member states, 3rd states & IGOs contributions, subject to agreement (Artt. 4(4), (5); 6(3), (4))
 - ESA: multi-year delegation agreement (Art. 18)
 - ◆ Subject to principles Art. 17 on public procurement (§ 1)
 - ◆ Lays down general conditions for management funds entrusted to ESA (§ 2)
 - ◆ Includes notably rules ownership all tangible & intangible assets (& transfer thereof to EC)
 - ◆ Financing ESA ends with end validation phase (Art. 4(1))

Liability & GNSS



- No GNSS-dedicated legal regime ...
 - ↔ Many partially applicable legal regimes
 - Space law liability – to damage caused by sats
 - Air law liability – to damage caused by aircraft
- Nature of damage to be focused on
 - ‘Indirect’ – e.g. aviation accidents as downstream consequences of faulty / absent signals

Liability (1)



- Liability general concept, very frequently used
 - Every state its own interpretation / implementation in domestic law
(Not to mention every expert ...)
 - ◆ In addition: liability at an international level
 - Usually phrased in terms of obligations to compensate for **damage** caused by one's activities
 - ↔ Liability is not 'self-evident' or 'God-given'

Liability (2)



- Liability is:
“the accountability of a person or legal entity to compensate damage caused to another person or legal entity, as determined by specific legal rules and principles and based upon specified sources of law”

Elements (1)



1. Type of liability

- Contractual
- Tort / third party;
- Special type: product damage

2. Fault *versus* absolute liability

- Or strict liability
- Burden of proof
- Possible exonerations
 - ◆ Contributory negligence? Gross negligence? Willful misconduct? 'Act of God' / *force majeure*?

Elements (2)



3. Accountable entities *versus* claimants

- On both ends
 - ◆ States? Intergovernmental organisations? Private parties? Individuals?

Note: Not necessarily who caused / suffered damage

4. Damage

- Only direct? Also indirect / loss of revenues?

5. Compensation

- Limited or unlimited? If limited, what limits?
- Moral / punitive 'damages'?

Back to GNSS



- Precise elaboration & application of each of these elements depends upon the applicable specific legal regime
 - As further detailed by jurisprudence of courts & tribunals properly seized of a dispute on the matter
 - Where no clearly applicable specific legal regime (or lack of clarity in its application), courts & tribunals, if obliged to adjudicate a dispute, have to interpret, elaborate & apply general principles, analogies etc. *motu proprio*

GPS & liability



- Discussions in ICAO
 1. Lack of liability acceptance USA
 - No contract, no guarantees, no fees
 - Russia / GLONASS essentially follows lead
 2. US acceptance of civil liability
 - Liability under national US law
 - ◆ Federal Tort Claims Act, Suits in Admiralty Act
 - ◆ Sovereignty-issues foreign user states
 - ◆ Practical problems with US cases
 - No 'international' liability acceptance

Galileo & liability



- International civil system
 - Commercial, with key private participation
- Towards liability acceptance ...?
 - No product liability as such
 - ◆ 'Galileo' structure not itself to produce or sell
 - Non-contractual liability ...?
 - ◆ Not for 'Galileo' itself to change
 - ◆ Within EU possibility for EC law to change?
 - Contractual liability ...?!
 - ◆ Notably including *appropriate derogation of liability*
 - ➔ Provide for black box-like monitoring

Galileo – Legal Issues

Int'l space law liability



- 1972 Liability Convention
 - Launching state(s) jointly & severally liable for damage caused by space objects
 - ◆ State launching, procuring, lending territory or facility for launch
 - ◆ Absolute liability on earth
 - ↔ Fault liability in space
 - ◆ Physical damage to humans / property
 - Caused by space object through collision
 - Excludes indirect damage, loss of revenue
 - ◆ Compensation in principle unlimited

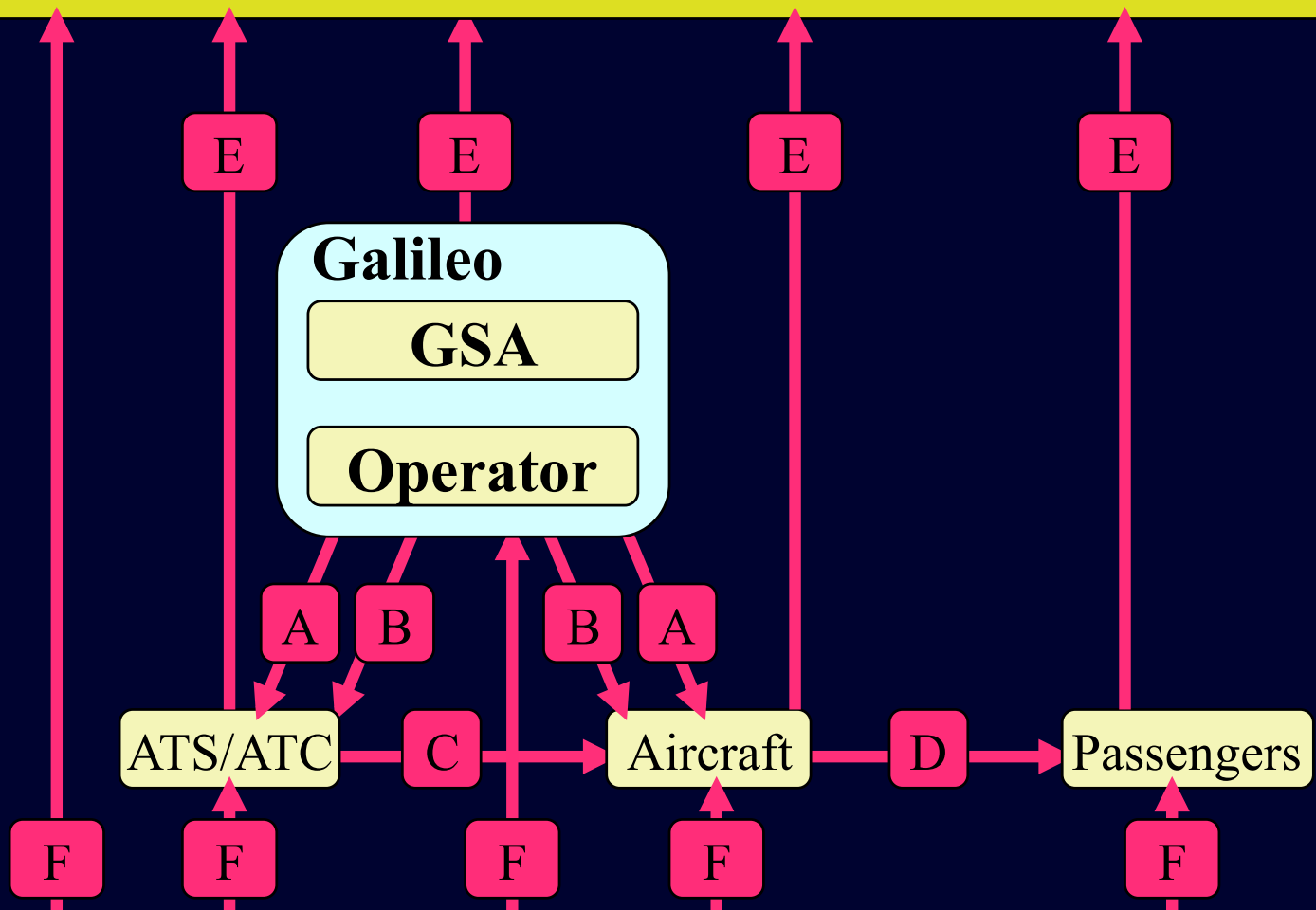
Int'l air law liability



- Third-party liability towards victims on the ground
 - 1952 Rome Convention, 1978 Montreal Protocol, 2009 Montreal Convention
 - National law (in most cases)
- Contractual liability towards passengers
 - From 1929 Warsaw Convention to 1999 Montreal Convention

Galileo Legal / Functional Model for aviation & liability

Third party victims of accidents related to aviation navigation by satellite



Legend:
 GSA = European GNSS Supervisory Authority
 ATS = Air Traffic Services
 ATC = Air Traffic Control
 A = No / tort (?) liability (OS)
 B = Contractual liability (SOL)
 C = ATS/ATC liability? / Contractual liability
 D = Contractual liability
 E = Tort / third-party liability
 F = Product liability

Manufacturers of relevant products – aircraft, avionics, satellite devices, etc.



Galileo – Legal Issues

Int'l maritime liability



- International regime for contractual liability *international* transport only
 - 1974 Athens Convention – for passengers
 - 1924 Hague Rules, 1968 Visby Rules & 1978 Hamburg Rules – on cargo
 - Private liability regimes – carriers are liable
 - Compensation subject to various limitations
 - ◆ Except if intent to cause damage / reckless behaviour
 - Fault liability regimes / reversed burden of proof
- Third-party liability completely nat'l

Int'l railroad liability



- International regime for *international* rail transportation – only contractual
 - 1980 COTIF Convention & 1990 Protocol
 - ◆ 1970 CIV Convention – for passengers
 - ◆ 1970 CIM Convention – for cargo
 - Private liability regimes – railway is liable
 - Compensation subject to various limitations
 - ◆ Except if intent to cause damage / reckless behaviour
 - Strict liability regimes (if no fault of passenger)
- Third-party liability completely nat'l

Int'l road liability



- International regime for *international* road transportation – only contractual
 - 1973 CVR Convention – for ‘mass’ passengers
 - 1956 CMR Convention & 1978 Protocol – on cargo
 - Private liability regimes – carriers are liable
 - Compensation subject to various limitations
 - ◆ Except if wilful misconduct / gross negligence
 - Strict liability regimes (if no fault of passenger)
- Third-party liability completely nat'l

Beyond int'l liability



- Contractual liability: free to contract
- Third-party liability
 - Theory third-party liability
 - Third-party liability in France
 - Third-party liability in the United Kingdom
- Product liability
 - Theory product liability
 - Product liability in France
 - Product liability in the United Kingdom

Third-party liability



= Non-contractual liability

- “Liability for damage occurring *outside* a contractual relationship, most prominently where the person or entity suffering the damage is in no way formally or contractually related to the person or entity causing it (or at least any damage caused would not be covered by any such formal or contractual relationship), and likely neither aware of the possibility of damage occurring nor able to take precautionary measures against it”

≈ Tort liability

France (1)



- French Civil Code, Artt. 1382, 1383
 - General fault-based non-contractual liability regime
 - ◆ Any wrongdoing by a person causing damage to third party must be compensated, whether such fault is intentional, or results from negligence or carelessness
 - ◆ Three key constitutive elements
 1. Fault – “illicit behaviour which contravenes an obligation or duty imposed by law or customary rules” (‘good parent’ standard)
 2. Damage – property & bodily, incl. moral
 3. Causal connection – “effective cause which generated damage”

France (2)



- Case law experience potentially applicable to GNSS services
 - Vicinity of satellite signal receiving station as ‘neighbourhood disturbance’ nuisance
 - ◆ French law applies ‘precautionary principle’: uncertainty of risk = damage in itself!
 - ◆ Regardless of administrative authorisation, & compliance therewith!
 - Fault can be characterised by failure contracting party to meet contractual duty to safely achieve given result when such failure causes damage to third parties

France (3)



- Liability = joint & several
 - Victim can assert claim against any defendant for any & all damages incurred, regardless of relative fault particular defendant
 - ➔ Failure in SOL service as one of multiple triggering events for airplane crash: operator could be considered liable by French court jointly & severally with other defendants
 - & Claimant could recover all damages from SOL service provider regardless of non-exclusivity of fault SOL service provider!

France (4)



- Criminal liability ...?
 - Malfunctions in GNSS service chain may trigger criminal liability
 - French Criminal Code covers some non-intentional offences
 - ◆ Physical integrity (Art. 222-19)
 - ◆ Death (Art. 221-6)
 - ◆ Endangering life person (Art. 223-1)
 - If at least deliberate violation safety obligation
 - Criminal liability may apply to legal persons
 - *Lex loci delicti* applied

United Kingdom (1)



- Tortious liability \approx fault-based
 - Claimant must prove sufficient 'proximity' to defendant to require duty of care owed by the latter to the former & negligent / fraudulent / deliberate behaviour in breaching this duty
 - ➔ Not very likely for GNSS operator to incur liability – for GNSS service provider this may be different
 - ◆ E.g., radio signals from satellite might give rise to private right of action in tort if operator could be proven to have been aware that signals could cause damage

United Kingdom (2)



- Limitation tortious liability
 - Allowed in most circumstances by appropriate notices
 - ◆ Sales GPS devices accompanied by notice of potential downgraded / unavailable signals
 - Restrictions however usually not applied when death / personal injury are concerned
- Exceptionally: strict liability
 - Almost always statutory
 - Primarily public health & safety issues
 - ◆ E.g. escape noxious substances

United Kingdom (3)



Note: Considerably less details as per statutes – UK = common law country → much larger role (interpretation) jurisprudence

→ Detailed analysis of likely approach UK courts to GNSS(-liability)-related disputes would require analysis of much more jurisprudence – or of possible tendency to draft statute?

Product liability (1)



- Different from contractual & third-party / non-contractual liability
 - Can, as the case may be, be understood either as a kind of contractual or as one of non-contractual liability
 - “Legal liability of manufacturers / sellers to compensate buyers, users & even bystanders for damages / injuries suffered because of defects in goods purchased / used *independently* of any activity involving the good & the liability for such activity”

Product liability (2)



- Starting point: EU Dir. 85/374
 - Amended by EU Dir. 1999/34 – esp. to include “electricity” in definition “product”
 - Within limits Dir. discretion to implement at national level
 - ◆ E.g. Germany: “product” = “any movable even though incorporated in another movable / immovable, as well as electricity”
 - Satellites & related equipment certainly covered; satellite *signals* not certain
 - Operator not very likely to be held directly liable in view of broad definition “producer” – but liability may ‘flow up’

France (1)



- Applicability to GNSS services?
 - “Product” = “Any movable, even though incorporated into an immovable. Electricity shall be deemed a product.” (Art. 1386-3)
 - ◆ No *dictum* courts yet on satellites as movables or not
 - 1. First scenario: liability as service provider?
 - ◆ Originally liability was extended to any supplier, but ECJ ruling: = breach Dir.
 - ➔ Narrower interpretation – only where producer cannot be identified (Art. 1386-7)
 - ➔ Now operator unlikely to be held liable for defects satellites / related equipment

France (2)



- Applicability to GNSS services? – *ctd.*
 2. Second scenario: liability for satellite signals?
 1. Analogy with legal framework radio frequencies
 - Characterised as immovable, part of state's 'real' estate
 - If applied here, product liability law would **not** apply
 2. Satellite signals = electromagnetic waves
 - Incorporation in 'electricity'?
 - ↔ *Expressio unius est exclusio alterius*
 - ◆ Specific difficulties with applying product liability to satellite signals would remain
 - What is 'defective' signal? To what extent can / should natural phenomena be seen as part of 'normal usage'?

United Kingdom



- Consumer Protection Act (1987)
 - No-fault based liability for personal injury / property damage > £ 275 for defective products by consumer
 - Liability for producer – or importer if product manufactured overseas
 - ◆ Applies to consumer products & products used in workplace
 - ➔ Unlikely to apply to satellite
 - ➔ Likely to apply to consumer devices using GNSS signals
 - No *dictum* on satellite signal as product or not

Galileo – Legal Issues

Conclusions (1)



- GNSS operators under current law likely to remain outside direct liability claims under tort / third-party or product liability
 - Although exceptions may apply ...
- Liability may however be ‘flowed up’ by original defendants using GNSS
 - Esp. if GNSS services not provided for free
 - Waivers may / may not be upheld

Conclusions (2)



- Differences between national laws individual states may lead to major differences in conditions under which liability entities involved in GNSS service provision chain would / might arise
- Depends partly upon which scenario is developed for exploitation GNSS
 - Public *versus* private operator

Conclusions (3)



- Generally speaking GNSS service provider may encounter third-party liability claims in various jurisdictions, usually on a fault-basis
- Sometimes GNSS service provider may be able to disclaim certain liabilities
 - Cf. also example of telecommunications
 - But if product liability applies, usually strict