

European Space Law – Part I

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'European space law?'

- ◆ 'Space law' = 'every legal or regulatory regime having a significant impact, even if implicitly or indirectly, on at least one type of space activity or major space application'
- ◆ 'Europe'?



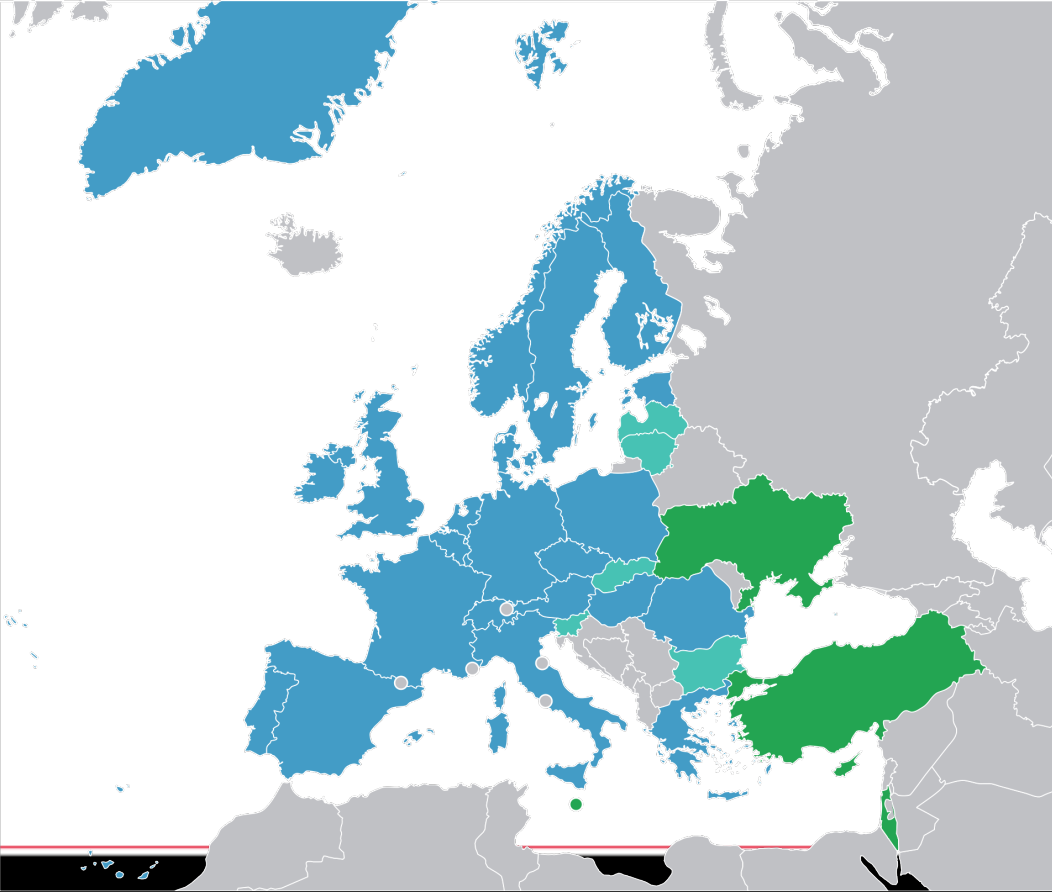
'Europe In Space'?



= European Union
(28 member
states)

Purpose:
General economic
(& political...?)
integration

'Europe In Space'?



= European Space Agency

(22 member states + 'aligned' states)

Purpose:

Integration of space programmes

Nebraska Law

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'Europe In Space'?



+ Kazakhstan →

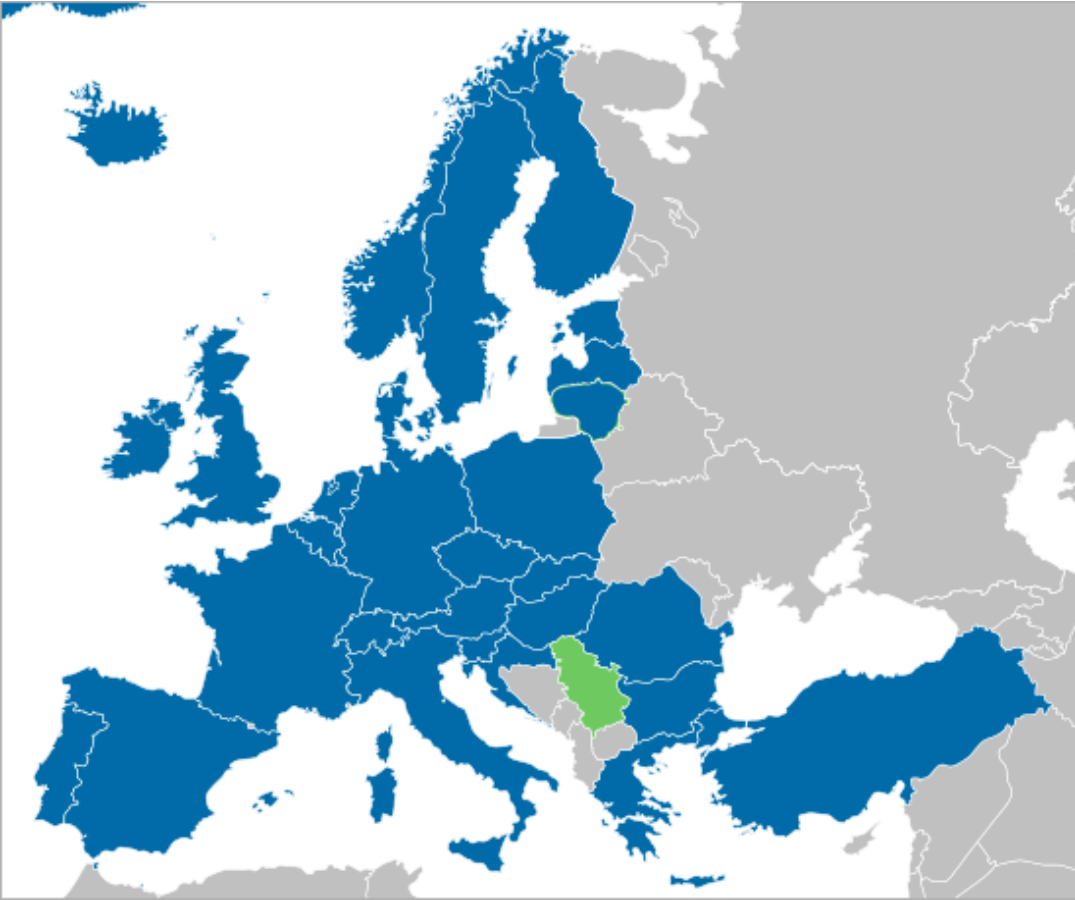
= EUTELSAT
IGO
(49 member
states)

Purpose:
Monitor operations
Eutelsat

Nebraska Law

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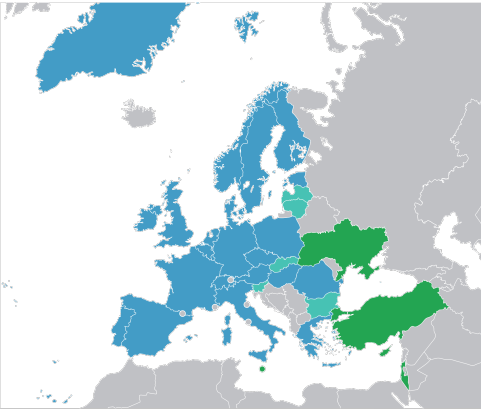
'Europe In Space'?



= EUMETSAT
(30 member states
+ one associate)

Purpose:
Provide for
European weather
satellite system

ESA *versus* EU



ESA = operational organization → legal impact through rules ESA Convention, intra-ESA/member state agreements & contracts



EU = regulatory partly-supranational organization → legal impact through directly applicable EU-law: Directives & Regulations

ESA and space (1)

- ◆ Main driver in integration space efforts Europe
 1. European flavour to national space projects
 2. European partner in bilateral space projects with others
 3. European partner in International Space Station
- ◆ Convention supported by 5 main Annexes
 - Annex V: Industrial policy – ‘how to best involve European space industry’

ESA and space (2)

◆ Institutional structure

- Main organs: Council & DG plus staff
 - Council decides on acceptance programmes proposed & determine financial structures thereof
 - DG can propose programmes
 - Individual member states can propose programmes...
 - ...but remain at liberty to run their own programmes either unilaterally or together with other states, whether ESA member states or not

ESA and space (3)

◆ Article II, ESA Convention:

“... to provide for and to promote, for exclusively peaceful purposes, cooperation among European States *in space research and technology and their space applications*, with a view to *their being used for scientific purposes and for operational space applications systems*

”
...

ESA programmes

◆ Three generic types of programmes

1. Mandatory activities – focused on scientific R & D
2. Optional activities – focused on (in-space) applications
3. Operational activities – ‘serving customers’
 - Flexible framework balancing sovereignty-interests & co-operation → industrial policy...?

Optional programmes

- ◆ Council may accept programmes with simple majority – Art. XI(5.c), ESA Convention
- ◆ Opportunity for member states to opt out – Art. V(1), ESA Convention
- ◆ Contributions in the last resort subject to individual states' interests – Art. XIII(2), ESA Convention → '*À la carte*' participation

ESA industrial policy comes in

- ◆ Art. VII, ESA Convention, main principles:
 - Promoting cost-effectivity (§ a)
 - Improving world-wide competitiveness industry (§ b)
 - Using existing industrial potential Europe (§ b)
 - Preference for European industry (§ c)
 - Equitable member state participation (§ c)
 - Exploit advantages competitive bidding (§ d)

Leading principle = 'fair return'

- ◆ Art. VII(1), Convention → Annex V
- ◆ Art. II, Annex V:
 - Preference for industry & organizations *member states*, resp. *those participating* in that programme
- ◆ Art. IV, Annex V:
 - Geographical distribution of contracts to industry follow respective investments of member states – ideal: return coefficient = 1

The EU and space (1)

- ◆ Not coming from a ‘space perspective’ – EU about economic integration in general
- ◆ ‘Space’ included only as addressed by EU law
 - Following conferral, subsidiarity & proportionality:
 1. Included explicitly in treaties / secondary EU law
 2. Implicitly following from provisions treaties / secondary EU law
 3. Exceptionally following ‘implied powers’ or Art. 352, TFEU, ‘appropriate measures’

The EU and space (2)

- ◆ No reference as such to ‘outer space’ in treaties or secondary law
 - Only reference in policy documents
- Only to the extent space activities are economic activities *may* EU law be(come) relevant
- Primarily where ‘markets’ & private companies are involved

Cornerstones EU law (1)

Key: focused on Internal Market!

1. Four freedoms of movement

- Goods, persons, services & capital

2. Competition regime

- Rules applying to private enterprise
 - Prohibition of collusive conduct (cartels)
 - Prohibition of abuse dominant position (monopolies)

Cornerstones EU law (2)

2. Competition regime (*ctd.*)

- Rules applying to states
 - Special & exclusive rights
 - Prohibition of state aid
- All with limited exceptions, subject to scrutiny
Commission & Court of Justice

3. Harmonization national laws

4. Sector-specific Titles – incl. transport!

The EU and space activities (1)

- ◆ Involvement limited to space sectors where relevant conditions were fulfilled
 - Commission no single space (policy) division
 - Launch activities: DG Trade
 - Satellite communications: DG Communications Networks, Technology & Content
 - Earth observation / remote sensing: DG Research & Innovation
 - Satellite navigation: DG Mobility & Transport

The EU and space activities (2)

- ◆ EC/EU no overarching / comprehensive space policy (at least until fairly recently)
- ◆ 1985: ESA determines, drives & coordinates European space effort
 - Arianespace spin-off for launch activities
 - EUTELSAT spin-off for satellite communications
 - EUMETSAT spin-off for satellite meteorology

The starting point for the EC/EU

1986: Commission starts to move in

- Realizing space industry could be / would be motor technological & economic development
- Starting through R & D, including R & D on space / using space, *i.a.* pre-application stage

Note: One area where Commission had rather free hand in spending, was in research programmes!

→ Legal basis provided by 1985/86 Single European Act

The EC/EU and launch activities?

◆ Present situation

- Arianespace only (private / commercial) European launch service provider
- Transport Title lists transport sectors involved explicitly – not launching (& space transportation)
- Launching & space transportation do not yet fall within scope EU law
- *Future: ‘space tourism’ flights ...?*

The EC/EU and launch activities!

- ◆ EC / EU involvement political ...
 - TCI case: discussion USA on global competition
 - ESA-Commission working group on international launch services policy → EGAS
 - Commission: negotiations with Russia, Ukraine & China in the 90s on global launch competition regime
 - Aborted: competition → cooperation
 - Starsem; Soyuz

EU *law* and launch activities? (1)

◆ ‘Hurdles to application’

- Visible need regulating competition in Europe?

↔ Need for global competitiveness ...?

- TFEU’s Transport Title needs to be changed
- Arianespace launches from Kourou, *i.e.* outside geographical scope Transport Title
- Security & defence implications ...

EU *law* and launch activities? (2)

◆ Manned spaceflight

- Curacao : also outside geographical scope Transport Title
- ↔ Kiruna, Catalonia, France, Scotland & England however within geographical scope Transport Title
- Temporary effort by EASA (= EU Agency) to prepare for European-wide regulation private manned spaceflight (*more tomorrow*)

The EC/EU and remote sensing?

◆ Private sector limited role

- So far really only SpotImage & TerraSar-X
 - Even those are essentially PPPs
- Balancing intra-European competitive interests (...?) with external competitiveness
- Security concerns
- EUMETSAT for satellite meteorology

The EC/EU and remote sensing!

- ◆ With a view to the Internal Market ...
 - Plans for ‘Green Eye in the Sky’ in the 90s!
 - SPOT-4 instrument
 - = EC as satellite operator → customer
 - Use for other monitoring purposes
 - Farming subsidies & fishing quota
 - Obligations under international environmental treaties
 - GMES/Copernicus: EU in the driver’s seat

EU *law* and remote sensing? (1)

- ◆ Definitional issues for Internal Market purposes
 - Products \leftrightarrow services
 - Under EU law: products by definition enjoying Internal Market privileges \leftrightarrow services requiring specific Directives
 - Trade across borders \leftrightarrow Distribution/extraction over Internet
 - Jurisdiction EU law over core activities in outer space \leftrightarrow Jurisdiction over operators on the ground

EU *law* and remote sensing? (2)

◆ Protection remote sensing data(bases)

- *ESA* involvement in remote sensing operations
 - In particular copyright
 - National differentiation contents national regimes
 - *E.g.* ‘sweat-of-the-brow’ versus ‘originality’ & applicability in electronic realm; duration of protection

→ *ESA* research project → Commission study

→ Need for a specific right to protect databases as including remote sensing databases → ...

Directive 96/9

- ◆ *Sui generis* right of protection
 - Special version of copyright, essentially
 - Mandatory inclusion in national law
 - Applies to nationals EU m/s & databases ≈ generated on EU m/s territory (Art. 11)
 - Individual accessibility & investment required
 - Extraction right & re-utilization right (Art. 7)
 - With database creator / owner

EU *law* and remote sensing? (3)

- ◆ Facilitating access to public information, including as generated with remote sensing satellites
- Oblige EU m/s to ease, liberalize & harmonize access to available spatial data – for environmental & other public policy purposes

INSPIRE Directive (2007/2)

- ◆ Establishing Infrastructure for Spatial Information in the European Community
 - Benefiting – *i.a.* – GMES, indirectly
 - Focus here on terrestrial infrastructure for distribution data
 - Provision metadata, interoperability of data, availability search & view services for free, & availability other services via e-commerce

The EU and space? The EU and...

... Satellite communications

= First space sector with commercial potential

→ First space sector interesting EC / EU

→ Full-fledged Internal Market requires also level playing field for private satellite communications

◆ Baseline: satellite communications = subset of telecommunications happening to use satellites as part of the network

Starting point: telecommunications

◆ EC / EU focus on practical aspects; tackles issue from the downstream perspective upwards

- Not concerned with specific space aspects

→ Space element almost coincidental

- Satellites just (potential) element in telecoms chain, competing (in principle) with cable & terrestrial wireless

→ Technological neutrality to be guaranteed

↔ Still need to heed specific space aspects involved?

& Relatively marginal, commercially speaking

The 1987 Green Paper

- ◆ Starting point liberalization & privatization of telecoms at large
 - Non-discriminatory & efficient access users to telecom networks & public services to be liberalized & open to private enterprise
 - Establishment Internal Market telecom services by 1998
 - *Excluding satellite communications as of yet*
 - Resulting rapidly in several key Directives

Reading break – 1

- ◆ *Arts. 101, 102, 106, 107, Treaty on the Functioning of the European Union*
- ◆ *Arts. 1–4, Regulation 4046/89*

Directive 88/301

◆ Competition terminal *equipment*

- Special & exclusive rights on import, marketing, connection, operating & maintenance terminal equipment should be abolished (Art. 2)
- Right to import *etc.* for companies other m/s only curtailed on objective, technical terms (Art. 3)
- Users should have guaranteed access to public network termination points (Art. 4)

Directive 90/387

- ◆ Internal Market telecom *services* assume/require open access to existing networks → ONP
 - Keeping incumbent exclusionary monopolies at bay
 - Harmonization conditions open & efficient access to & use of public telecom networks & services (Art. 1)
 - ONP conditions must be based on objective criteria, transparent, guarantee equality of access & be non-discriminatory (Art. 3)

Directive 90/388

◆ Competition telecom *services*

- Special & exclusive rights provision telecom services other than voice telephony to be withdrawn (Art. 2)
- Conditions for license only if objective, non-discriminatory & transparent (Art. 2)
- Temporary exclusion possible for packet- or circuit-switched data (Art. 3)
- Separate independent supervision (Art. 7)

Implementation...? (1)

◆ *Opposition*

- 88/301: France v. Commission, C-202/88 (1991)
 - Directive partly upheld, partly annulled: special rights were not required to be withdrawn, exclusive rights were
- 90/388: Spain, Belgium & Italy v. Commission, C-271, C-281 & C-289/90 (1992)
 - Directive partly upheld, partly annulled along the same lines as 88/301

Implementation...? (2)

↔ *Pre-empting* legislation UK

- 1981 separation regulatory & operational functions BT
 - Followed by Germany, 1989 & France, 1991
- 1984 Telecommunications Act – creation duopoly British Telecom & Mercury

... → **Satellite communications?**

◆ INTELSAT & INMARSAT (& INTERSPUTNIK)

◆ EUTELSAT

- Hybrid character: ‘public consortium’
 - Convention: member states & Operating Agreement: Public Telecom Operators
- Activities \pm 75% DBS
- HQ in Paris; 18 sats (GEO) by 2001
- 47 member states by 2001

Global market developments

- ◆ Call to privatize operators & liberalize markets
 - Signatories EUTELSAT usually also signatories to INTELSAT & INMARSAT → monopolies
 - “Considerable economic prejudice” clause
 - PTOs often both operators and national regulators
 - Public nature (most) PTOs → functional immunities
 - Financial backing by m/s & guaranteed market access
 - *Application EC / EU competition law???* → [Nebraska Law](#)

Competition DBS services

◆ EUTELSAT *versus* SES

- SES = Luxembourg entity; BT major investor
- Luxembourg & UK m/s EUTELSAT & EC / EU
- 1987: ‘Considerable economic prejudice’
- EUTELSAT Assembly ‘imposes’ code of good behaviour (applicable until 1998)
 - No more than 4 customers may be lured away
 - Only rapidly expanding number of TV channels allowed SES to survive

→ 1. Privatization EUTELSAT...

- ◆ EC / EU did not yet have jurisdiction over satellite communications
- Pressure on EUTELSAT to privatize – first political, later legal
 - Privatization PTOs (also INTELSAT & INMARSAT)
 - Non-application “considerable economic prejudice”
 - Allowing for ‘multiple signatories’
 - 1999: full privatization

Eutelsat S.A.

- ◆ 2001 / 2003 established, HQ Paris
- ◆ Nov. 2001: \pm 14% Lehman Brothers (from Telecom Italia)
- ◆ 2003: IPO, min. 30% to newcomers
- ◆ Branching out
 - Multi-media & Internet; terminals market; Africa
- ◆ Currently capacity on 40 sats (GEO)

EUTELSAT IGO

- ◆ HQ Paris
- ◆ Now 49 member states
 - Incl. 28 EU; 22 ESA; also *e.g.* Vatican; Turkey; Russia; Ukraine & Kazakhstan
- ◆ Main function: oversight Eutelsat S.A.
 - Four basic principles: public & universal service obligations; Pan-European coverage satellite system; non-discrimination & fair competition

...& 2. EC policy and legislation!

- ◆ Need to move on from telecommunications to satellite communications
- Towards Europe-wide systems and services – Green Paper on common approach in the field of satellite communications in the European Community, a.k.a. ...

The 1990 Green Paper

◆ Aims:

- Full liberalization earth segments of satellite systems
- Application competition regime to satellite communications
- Unrestricted access to space segment capacity
- Commercial freedom to market space segment capacity
- Separation regulatory & operational functions

Directive 94/46

- ◆ ‘Satellite Directive’
- ◆ Amending Dir. 88/301 & Dir. 90/388 with regard to satellite communications
- & One further key measure with regard to the operational satellite IGOs
- ◆ Measures to be implemented per XI/1994 – exceptionally per I/1996

Reading break – 2

◆ *Arts. 1–3, Directive 94/46*

Art. 1: Directive 88/301 (1)

- ◆ ‘Terminal equipment also means satellite earth station equipment’
 - Transmit-only, transmit/receive & receive-only
- 1. No more special & exclusive rights on import, marketing, connection, operating & maintenance satellite earth station equipment
 - Legal / regulatory advantages substantially affecting ability to do any of the above

Art. 1: Directive 88/301 (2)

2. Curtailment right to import *etc.* of companies other m/s only on objective, technical terms also applicable to satellite earth station equipment
3. Guaranteed access public network termination points also for satellite earth station equipment

Art. 2: Directive 90/388 (1)

- ◆ ‘Telecom service means also satellite services’:
 - Satellite services: includes network services as well as proper provision of communication
 - Satellite network services: establishment & operation of satellite networks, including uplink & downlink services
 - Satellite earth station network: two / more earth stations interworking by way of satellites

Art. 2: Directive 90/388 (2)

→ Special & exclusive rights prohibited also for provision satcom services

- Exclusive rights: “rights granted by an EU m/s to undertaking in any manner reserving it the right to provide a telecom service within a given geographical area”
- Special rights: “rights granted by an EU m/s to a limited number of undertakings conferring legal / regulatory advantages”

Art. 2: Directive 90/388 (3)

→ Only objective, non-discriminatory & transparent conditions for satcom license are allowed

= ‘Essential requirements’

= Non-economic reasons, such as network security & integrity, interoperability & data protection

+ For satcoms services: effective use frequency spectrum & avoidance harmful interference

→ Separation of any specific supervision body for satcoms also required

Art. 2: Directive 90/388 (4)

- ◆ Transparency of information required on:
 - Criteria & conditions for granting authorizations
 - Plans to introduce new / change existing licensing procedures
 - Fees & criteria upon which they are based, & any changes
- ◆ Still maintains exclusion voice telephony from scope of harmonization

Art. 3: satellite IGOs (1)

- ◆ “EU m/s party to international conventions INTELSAT, INMARSAT, EUTELSAT & INTERSPUTNIK shall communicate to the Commission info on any measure that could prejudice compliance with competition rules of EC Treaty or affect aims of Directive 94/46 or Directives on telecoms”

Art. 3: satellite IGOs (2)

◆ *Legal effect EU law on IGOs?*

- IGOs not subject to EU law

& Includes non-EU m/s

↔ EU law impacts IGOs indirectly via EU m/s

- EU law impacts IGO Signatories EU m/s directly – as ‘undertakings’ (*cf.* Arts. 101 & 102, TFEU)

Art. 3: satellite IGOs (3)

◆ Legal effect EU law on IGOs – *ctd.*

▪ EC m/s (15) & satellite IGOs as per 1990:

- INTELSAT – 28% in terms of investment
- INMARSAT – 34% in terms of investment
- EUTELSAT – 88% in terms of investment
- INTERSPUTNIK – only Germany

→ Difference EUTELSAT – others

- Forcing proper privatization versus ‘stimulating’

Art. 3: satellite IGOs (4)

- ◆ Anti-competitive aspects henceforth to be tackled by EU competition regime
 - Commission started to apply those ‘legal tools’
 - For EU m/s:
 - ‘Special & exclusive rights’ (Art. 106, TFEU)
 - ‘State aid’ (Art. 107, TFEU)
 - For IGO Signatories EU m/s:
 - ‘Collusive conduct’ (Art. 101, TFEU)
 - ‘Abuse dominant position’ (Art. 102, TFEU)

Decision No. 94/895

- ◆ International Private Satellite Partners (IPSP)
 - Trans-boundary joint venture, registered USA, led by Orion, with market coordination aspects
 - Commission abstained from action (only) since it primarily involved non-PTO private companies, which moreover were new in the field & hence enhanced competition rather than distorting it
- Effectively exempted per Art. 101(3), TFEU

Decision No. 96/177

◆ Nordic Satellite Distribution

- Activities 3 Scandinavian companies under NSD joint venture amounted to market-sharing arrangements for terrestrial services using satellite transponders
- Found incompatible by Commission with functioning Internal Market; & not justified in the absence of technological & economic progress

→ Joint venture had to be dismantled

Decision IV/M.1430 (1999)(1)

◆ Vodafone / AirTouch

- Investigation upon notification 6/IV/1999
 - Under Reg. 4064/89 ('Merger Regulation', v.1)

◆ Commission takes Decision, 21/V/1999

- Six standard parts: I. Parties / II. Operations / Concentration / III. Community Dimension / IV. Competitive Assessment / V. Modifications / VI. Conclusion

Decision IV/M.1430 (1999)(2)

I. Parties

3. Vodafone (UK) provides *i.a.* mobile satcom services in UK & 5 other EU m/s (France, Germany, Greece, the Netherlands & Sweden)
4. AirTouch (USA) provides *i.a.* personal communication services & global satcom services in USA & 6 EU m/s (Belgium, Germany, Italy, Portugal, Spain & Sweden)

Decision IV/M.1430 (1999)(3)

II. Operations & Concentration

6. Sole control to be achieved ('take over')

Decision IV/M.1430 (1999)(4)

III. Community Dimension

7. Combined aggregate world-wide turnover $> 5 \text{ B } \text{€}$
(Vodafone 3,569 M € & AirTouch 6,716 M €; 1998)
 - Each has EU-wide turnover $> 250 \text{ M } \text{€}$ (Vodafone 3,285 M € & AirTouch [...]; 1998)
 - Only Vodafone $> 2/3$ of aggregate EU-wide turnover within 1 EU m/s (2,560 M € in UK; 1998)
- Notified operation Community dimension

Decision IV/M.1430 (1999)(5)

IV. Competitive Assessment

A. Relevant product market

- = Market mobile telecom services, regardless of technical standard used (8, 9, 12)
- Anyway, no dominance in any product market (12)

B. Relevant geographic market

- = National market (13, 17)

Decision IV/M.1430 (1999)(6)

IV. Competitive Assessment – *ctd.*

C. Assessment

- Overlap only in Germany & Sweden (18)
- Competition concerns only in Germany: new entity would command a 50-60% market share (19-29 → 30)

Decision IV/M.1430 (1999)(7)

V. Modifications

31. Vodafone submitted a ‘divestment undertaking’ in a German daughter with market share of 10-20%
35. In subsequent market test by Commission no 3rd party voiced significant objections to planned divestment

Decision IV/M.1430 (1999)(8)

VI. Conclusion

36. Undertaking sufficient to address competition concerns raised by concentration → Commission will not oppose notified concentration & declares it compatible with common market (*ref.* Art. 6(1)(b), Reg. 4064/89)

Decision IV/M.1817 (2000)(1)

◆ Bell South acquires shares E-Plus

III. Community Dimension

8. Combined aggregate worldwide turnover > 5 B €;
both with EU-wide turnover > 250 M €; neither with
 $> 2/3$ of aggregate EU-wide turnover within 1 EU m/s
→ yes

Decision IV/M.1817 (2000)(2)

IV. Competitive Assessment

11. Only E-Plus itself active in mobile telephony services (= product) market Germany (= geographic market) →
12. Concentration will not lead to dominant position
& Current transaction will actually eliminate competition concerns identified in Vodafone/Airtouch transaction!

Decision No. 2004/134

- ◆ GE takeover Honeywell Bull – in 2001!
 - With small satellite communication component

III. Community Dimension: yes

- Both EU-wide turnover > 250 M €; neither achieves > 2/3 aggregate EU-wide turnover within 1 EU m/s

IV. Conclusion:

- Proposed merger would lead to creation or strengthening dominant position → declared incompatible with the common market *cf.* Regulation 4064/89

Decision No. 2003/792

◆ DaimlerChrysler / Deutsche Telekom

- Establishment joint venture Toll Collect

IV. Assessment (Art. 2, Reg. 4064/89)

66. Dominant position in German market traffic telematics

→ Effective competition significantly impeded in substantial part of the common market

V. & VI. Commitments to open access to the system

69. Considered sufficient to remove doubts

Follow-up legislation

- ◆ In 1994–2002 period many follow-up Directives & Regulations trying to elaborate & expand scope of the baseline regime of Dir. 94/46, *e.g.* to include cable TV networks, fixed voice telephony & mobile telephony
- & Address licensing...

Licensing issue

- ◆ Need to move also harmonization of licensing
 - Competition regime not sufficient: applies essentially to undertakings & as a matter of a posteriori control
- ↔ Fully-competitive environment also requires harmonized licensing
 - Dir. 94/46: only requirements on ‘non-economic issues’
 - Precursor: four-state initiative 1993
 - UK, Germany, France & Netherlands had allowed for ‘one-stop-shopping’ for license, for all four states

Directive 97/13 (1)

- ◆ ‘On common framework general authorizations & individual licences in telecom services’
 - Procedures for grant authorizations & conditions for providing telecom services, including for establishment / operation of telecom networks required for provision such services (Art. 1(1))
 - M/s discretion remains on distribution & content audiovisual programmes general public (Art. 1(2))

Directive 97/13 (2)

1. General authorizations (Art. 4(1))
2. Individual licences
 - Further to Art. 3(3), only if necessary (Art. 7(1)):
 - (a) To allow access to radio frequencies or numbers
 - (b) To give licensee particular rights on access to land
 - (c) To impose obligations of universal service
 - (d) To impose specific obligations, *cf.* EU competition rules, where licensee has significant market power

→ ICT convergence

= Latest on telecoms → satcoms in EU

= Essentially about ‘technology/platform-neutrality’

- Different legal & regulatory regimes made increasingly less sense because of opportunities to switch between technologies → ‘technological’ harmonization !
- Specific issue of privacy & data protection
- Following Green Paper radio-spectrum policy (1998)
→ 2002: general overhaul & update by ICT convergence package (*more tomorrow*)