

# **Has the 1996 Database Directive Promoted a Strong Database Industry?**

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# Topics for Discussion

- Introduction
  - What is a database
  - Database industry statistics
  - State of protection internationally
- How Should Databases Be Protected?
- 1996 Information Database Directive
- Consequences of 4 recent EJC judgments
- Policy recommendations

# What is a Database?

- “A collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means”
  - Art. 1.2, 1996 Information Database Directive
- The term “database” is given a wide scope
  - ¶ 2, Fixtures Marketing Limited v Organismos Prognostikon Agonon Podosphairou AE, ECJ Judgment, case C-444/02, 09 Nov. 2004
- The materials must be separable from each other (a book, music CD or movie is not a database)
  - R17, 1996 Information Database Directive and ¶ 29, Fixtures Marketing Limited v Organismos Prognostikon Agonon Podosphairou AE
- It does not include computer programs used to make or operate the database
  - R23, 1996 Information Database Directive

# Database Industry Statistics\*

- 1975-2003: databases worldwide grew from 301 to 18,214
- In 2003: Europe produced 28% of all databases and North America produced 68%
- Countries with more than 100 databases: US (8125), England (1156), Germany (656), Finland (385), Canada (382), France (286), Australia (283), Denmark (242), Norway (227), Sweden (162), Netherlands (160), Korea (156), Switzerland (122) and Belgium (121)
- In 1996: the estimated size of the European Union's electronic information supply market was 7.6 billion euro

\*Martha E. Williams, "The State of Databases Today: 2004," Gale Directory of Databases 2004 Vol. 1, Part 1 (Gale Research, Detroit)

# Database Industry Statistics\*

- Dominant producers:
  - 1977: government 56%, commercial 22%
  - 2003: government 11%, commercial 78%, noncommercial 10%
- Subject areas in 2003: science/technology 22%, engineering 22%, health/life sciences 15%, general 10%, multidisciplinary academic 9%, law 8%, humanities 6%, social sciences 6%, news 3%
- Distribution mechanisms in 2003: online 59%, CD 30%
- Functions: inherently unique, information infrastructure, research, raw data, commercial, public
  - Thomas Riis, “Economic Impact of the Protection of Unoriginal Databases in Developing Countries and Countries in Transition,” (WIPO, 1992)

\*Martha E. Williams, “The State of Databases Today: 2004,” Gale Directory of Databases 2004 Vol. 1, Part 1 (Gale Research, Detroit)

# A Short History of Database Protection

- European Union
  - 1996 Information Database Directive protects contents
  - 2004 ECJ heightens qualification for content protection
- United States
  - 1991 US Supreme Court in Feist Publications v. Rural Telephone Service states factual contents not protected
- International Level
  - Every year EU introduces database content protection but US vetoes
  - EU & US models are replicated in other nations according to which region has the most influence

# How Should Databases Be Protected?

- Production Incentive
- Public goods aspect of intellectual property
  - Non-rivalrous: everyone can use it
  - Non-excludable: can't prevent others from using
- Implication: need an economic incentive to produce
- Policy question: when is an incentive needed and how much?
- Information Access
- Indispensable for further innovation, knowledge development and technological progress
  - drives basic infrastructure
  - fosters revolutionary developments in science and technology
  - stimulates continuous innovation in business.
- Implication: economic incentive must be limited to guarantee information access
- Policy question: how much access is needed and should it ever be guaranteed?

# Mechanisms to Maintain the Balance

- Heightening qualification for protection
- Narrowing the scope of exclusive rights
  - restricting its duration
- Instituting limitations for use of the work without permission
  - research, teaching or news reporting
- Mandating that certain parts of a work are free
  - The idea-expression dichotomy/fact-expression dichotomy
    - 1793, concept first developed in Germany
      - “The Justification of the Protection of Authors’ Rights As Reflected in Their Historical Development,” (Revue Internationale Du Droit D’Auteur, No. 151, Jan. 1992)
    - Art. 9.2 TRIPS: "copyright protection shall extend to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such"
    - R46, 1996 Information Database Directive, the *sui generis* right “should not give rise to the creation of a new right in the works, data or materials themselves”

# The Purpose of the 1996 Information Database Directive

- Overall objective: to promote the growth of a strong database industry
- Obstacles:
  - The negative effects of the lack of harmonization
  - The absence of sufficient protection of database contents
  - The exponential growth in information materials
  - The imbalance in investment
- Solutions:
  - Harmonizing protection
  - Protecting database contents, not just structure and arrangement
  - Promoting investment in advanced information management systems
  - Developing a stable, uniform legal regime

# Database Content Protection: Qualification of a Database

- Qualification for any database in which the producer shows:
  - “that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents” Art. 7(1)
  - Investment can include, “the deployment of financial resources and/or the expending of time, effort and energy” R40.
  - A compilation of musical recordings on a CD does not meet the substantial investment criteria R19

# Database Content Protection: Two Exclusive Rights

- A database maker is granted rights to prevent
  - “the extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database” Art.7.1
  - “the repeated and systematic extraction and/or re-utilization of insubstantial parts of the contents of the database implying acts which conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interests of the maker” Art. 7.5
- Two definitions are provided
  - Extraction is “the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form.” Art. 7.2
  - Re-utilization is: “any form of making available to the public all or a substantial part of the contents of a database by the distribution of copies, by renting, by on-line or other forms of transmission.” Art. 7.2

# Database Content Protection: Term of Protection

- Duration is 15 years
- It is renewable under the following conditions: “Any substantial change, evaluated qualitatively or quantitatively, to the contents of a database, including any substantial change resulting from the accumulation of successive additions, deletions or alterations, which would result in the database being considered to be a substantial new investment, evaluated qualitatively or quantitatively, shall qualify the database resulting from that investment for its own term of protection” Art. 10.3
- A substantial verification of database contents can trigger an additional term R55

# Database Content Protection: Exceptions and Limitations

- **Mandatory**
  - the lawful user can freely employ insubstantial parts of database contents, “for any purpose whatsoever” as long as it does not “conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker.” Art. 8.
- **Three optional exceptions in which the lawful user can employ substantial parts**
  - “in the case of extraction for private purposes of the contents of a non-electronic database”
  - “in the case of extraction for the purposes of illustration for teaching or scientific research of a non-commercial nature”
  - “in the case of extraction and/or re-utilization for the purposes of public security or an administrative or judicial procedure” Art 9
- **Free**
  - the exclusive rights of database protection “should not give rise to the creation of a new right in the works, data or materials themselves” R46

## Database Content Protection: Questions

- What is the threshold for qualification?
- What constitutes infringement of both a substantial and an insubstantial part of the database?
- How exactly can infringement be measured both quantitatively and qualitatively?

# Database Content Protection: National Court Interpretations

- Finnish Case, Fixtures Marketing LTD v. Oy Veikkaus Ab
  - Facts: the Finnish betting monopoly used data from plaintiff's fixture list of the British and Scottish football leagues for its sports betting service
  - Plaintiff's arguments: 1. the fixtures list is a protected database and 2. the defendant had to pay for the data used no matter its source (example: newspapers) because ultimately the data comes from plaintiff's database
  - Defendant's arguments: 1. the database is a spin-off activity falling outside the scope of database protection because the collection of data is not specifically directed at the obtaining, verification and presentation of the database
  - Copyright Council advisory opinion: the fixture list is a protected database but the defendant did not infringe
  - Court stayed opinion and sought a preliminary ruling

# Database Content Protection: National Court Interpretations

- Swedish Case, Fixtures Marketing Ltd. V. AB Svenska Spel
  - Facts: defendant operates betting service for football matches and prints plaintiff's fixture list data on pool coupons
  - Lower court: the fixture list is a protected database but its use is not an infringement
  - Appeals court: upheld, did not rule if list was a protected database but held that it was not proven that data was extracted
  - Highest Court: stayed proceedings and sought a preliminary ruling
- Greek Case, Fixtures Marketing Limited v Organismos Prognostikon Agonon Podosphairou AE
  - Facts: defendant has monopoly on gambling and uses plaintiff's fixture list data
  - Court: stayed proceedings and sought a preliminary ruling

# Database Content Protection: National Court Interpretations

- British case, British Horseracing Board v. William Hill Organization
  - Facts: BHB organized horse races in England and created a fixture list containing horse race information. The list formed part of a larger database consisting of 214 tables with over 20 million records. The defendant, William Hill, was a leading off-track bookmaking service. It posted horse racing data on its internet betting site which was ultimately derived from the BHB fixture list.
  - BHB arguments: its database qualified for protection and William Hill's infringed both a substantial and insubstantial part of the database
  - William Hill's arguments: the data is already in the public domain in newspapers and teletexts by the time it is published on its website and is therefore free. Even if it does take part of the database contents, it does not take a substantial part or insubstantial part

# Database Content Protection: National Court Interpretations

- Lower British court (2001)
  - The database qualified for protection under the following threshold: 1. investment must be substantial enough to justify protection; but 2. the qualifying level of investment is fairly low under Recital 19
  - Infringement of a qualitatively substantial part can relate to the intrinsic value of the data to the producer
  - Since the purpose of the database was to facilitate racing, its crucial part related to the races.
  - William Hill infringed because it was “relying on and taking advantage of the completeness and accuracy of the information taken ... in other words the product of BHB's investment in obtaining and verifying that data. This is a substantial part of the contents” ¶53
- The court of appeal (2001)
  - would likely uphold the lower court's decision, but sought a preliminary ruling on 11 questions

# Database Content Protection: Interpretations at the ECJ

- Advocate General's Advisory Opinion:
  - Qualification:
    - National courts should determine
    - Only resources used to obtain, verify and present existing materials count. Resources used to create data do not
    - Obtaining can include data creation if it takes place at the same time and is inseparable from it
    - The BHB database may qualify because its data was created and obtained simultaneously
  - Infringement of a substantial part: Intrinsic value is relevant. An evaluation of a qualitative part of a database could include the importance of the data and of the investment made by the producer
  - Infringement of an insubstantial part: functions as a protection clause to avoid circumvention of substantial use prohibition

# Database Content Protection

## A Strong Property Rights Model?

- Production Incentives Overprotective
- Low qualification threshold
  - UK lower court: almost anything short of a music CD R19
  - AG: low threshold that national courts determine
- Substantial infringement
  - UK lower court and AG: the intrinsic value of the data is determinant
  - if any critical part can be considered substantial, what would not infringe?
- Insubstantial infringement
  - UK lower court: non infringing use is an author of weekly fiction who picks horse names from BHB database ¶ 75.
  - AG: just short of individual data
- Term could last forever
- Information access
- When is the incentive needed? Should it apply equally to:
  - Commercial
  - Noncommercial
  - Public
- No guaranteed access if sole source producer
- Is data protected?
- When should access be guaranteed? Should it apply equally to all users
  - Commercial
  - Noncommercial
  - Public
- Narrow limitations
  - Mandatory exception is redundant
  - 3 others are narrow and optional extraction

# Did the 1996 Database Directive Promote a Strong Database Industry?

## First Survey\*

- 1998: growth spurt in France, UK and Germany after the Directive was first implemented
- 2000:
  - France and Germany: production dropped down to pre-Directive levels two years later
  - UK: growth also dropped but remained slightly higher than before

\*Maurer, Hugenholtz & Onsrud, "Europe's Database Experiment," Science, Oct. 2001

## Second survey\*

- Western Europe grew from 3092 in 1998 to 4085 in 2001, but dropped to 3820 in 2003
- US grew from 7321 in 2001 to 8515 in 2003

\*Williams, "The State of Databases Today: 2004"

# The ECJ Opinions: Qualification Threshold

- Qualification threshold raised
  - Obtaining: investment in finding and collecting existing data but never the creation of the actual data
  - Verification: resources used to ensure reliability and to monitor their accuracy during gathering and operation but never refers to verification during data creation.
  - Presentation: resources used for arrangement of materials and organization of their individual accessibility
  - Implication: Sole source databases not protected. But data creators can receive protection by proof of a substantial investment independent of resources used for data creation
- None of the databases qualify under higher threshold
  - Resources used to draw up a list of horses in a race or to establish the dates, times and team pairings of football matches and carry out checks in that connection are used to create not gather the data

# The ECJ Opinions

## Scope of the Protection

- Purpose: to prevent significant detriment, evaluated qualitatively or quantitatively, to the investment
- Implication: both substantial and insubstantial refer to the investment in the creation of the database and the prejudice caused to that investment by the act of extracting or re-utilizing
- Not counted: the intrinsic value of the materials affected does not constitute a relevant criterion of evaluation

# The ECJ Opinions: Right to Prevent Substantial Taking

- Right to prevent: “the extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database”
- Extraction and/or re-utilization can be direct or indirect
- Substantial part
  - evaluated quantitatively refers to the volume of data extracted. A user takes a quantitatively significant part of the contents of a database if the creation of that part requires the deployment of substantial resources
  - evaluated qualitatively refers to the scale of the investment, regardless of quantity. A small part may represent a significant human, technical or financial investment in the obtaining, verifying and presenting existing materials

# The ECJ Opinions: Right to Prevent Insubstantial Taking

- Right to prevent: “the repeated and systematic extraction and/or re-utilization of insubstantial parts of the contents of the database implying acts which conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interests of the maker”
- Extraction and/or re-utilization can be direct or indirect
- Insubstantial:
  - Any part which does not fulfill the definition of substantial falls within the definition of an insubstantial part
- Normal exploitation/unreasonable prejudice: “acts which, because of their repeated and systematic character, would lead to the reconstitution of the database as a whole or, at the very least, of a substantial part of it, without the authorization of the maker”

## The ECJ Opinions: Holdings

- No qualification: none of the databases qualified
- No infringement: although data derived from the database and was extracted and re-utilized none of the users infringed a substantial or insubstantial part

# ECJ Judgment Promotes A Strong Database Industry

- Production Incentives
  - Qualification of database narrowed
  - Scope of right broad but well-defined
- Information Access
  - When are economic incentives needed?
  - Are limitations too narrow?
  - Is innovation promoted?
    - Public info
    - Noncommercial sectors
    - Sole source data?

# ECJ Judgment: Qualification of a Database

## Production Incentives

- Qualification of database narrowed
- Implication: database makers of single source data are not protected
- Problems:
  - Where is the line for substantial investment evaluated quantitatively and qualitatively?
  - What is the difference between obtaining and creating?
    - Ex: stock market quotes, scientific data, census data?
  - Single source databases can be protected by investing substantial resources in presentation or verification
  - Technical measures

## Information Access

- Is heightened qualification enough?
- Narrow limitations
  - Mandatory exception is redundant
  - 3 others are narrow and optional extraction
- When is the incentive needed?
  - Commercial, public, noncommercial
  - Research databases

# ECJ Judgment Promotes A Strong Database Industry

## Production Incentives

- Scope of right broad but well-defined
  - Direct and indirect useage
- Substantial part evaluated quantitatively: sheer volume
- Substantial part evaluated qualitatively: scale
  - Could a significant human, investment be one piece of data?
- Term of protection could last forever

## Information Access

- When should access be guaranteed?
  - Sole source databases?
  - Information infrastructure databases?
  - Research databases?
  - Public or noncommercial databases?
- Should there be guaranteed access to sole source data that is protected?
- Should there be an exception for public databases
- Should additional exceptions be expanded?

# Right of Consultation: a New Limitation in British Horseracing Board

- Triggered when a database is made available to the public, by the database maker or an authorized third party
- Scope: a lawful user cannot be prevented from consulting a database.
- Definition of lawful user “a user whose access to the contents of a database for the purpose of consultation results from the direct or indirect consent of the maker of the database.”
- The cost of re-utilization can reflect any anticipated consultation

# Policy Recommendations

- Monitor the caselaw and its effect on the needs of the industry and on users
- Evaluate impact on public and noncommercial sectors
- Consider implementing revisions if needed
  - Compulsory licenses
  - Limitations for noncommercial sector
  - Right of access to public databases