Open Source Software and evolution of Intellectual Property Rights at EUROCONTROL

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Introduction

EUROCONTROL and Open Source Software



Terms

Open Source Software and Free Software



Free Software

- Freedom 0: Freedom to run the program, for any purpose.
- Freedom 1: Freedom to study how the program works, and adapt it to your needs.
- Freedom 2: Freedom to redistribute copies.
- Freedom 3: Freedom to improve the program, and release your improvements to the public.



Open Source Software

- Free Redistribution
- Source Code must either be included or freely obtainable.
- Redistribution of modifications must be allowed.
- Integrity of the Author's Source Code:
- No Discrimination against Persons or Groups
- No Discrimination against Fields of Endeavour
- Distribution of License
- License must not be specific to a Product
- License must not Restrict Other Software
- License must be Technology-Neutral



Free Software / Open Source Software

All open source software is free software.

Open Source "definition" for today:

- Software built/developed and enhanced through public collaboration.
- free (unrestricted access to the source code)

BUT

- not necessarily free of charge, or
- there are copyrights



Copyright

Right created by an author of publications in the literary, scientific and artistic domain, whatever may be the mode or form of its expression.

Continental European Law vs Anglo-saxon (Common) law "droit d'auteur" / Urheberrecht vs copyright.

Open source software and Free Software are copyrighted



Copyleft

Copyleft is a notice in connection with free software to make sure that every person can use, modify, and also redistribute both software and derived versions.

This is the main content of General Public Licences.

Copyleft is the "opposite" of copyright.



General Public Licences

GPLs aim at ensuring that further developments are made available as open source as well.

Private copies and developments made for private use and which are not further distributed do not fall under the obligation of redistribution.



Patents

US approach vs European approach

Software patents in Europe have suffered this year a set back in 2005.

Software has already been and will continue to be patented in Europe.



Conditions for the patentability of an invention are:

- It must be new,
- It must be possible to apply it industrially, and
- It must involve an inventive step.

Patentability of computer programmes as such is excluded BUT

Software is considered to be patentable if it has a technical character.



Public Domain

Material that is uncopyrighted, i.e. whose copyright has expired, or is uncopyrightable.



Freeware

- Software made available free of charge
- Copyrighted by developer
- Developer retains the rights to control its distribution and modifications
- Without source code
- Redistribution sometimes possible



EUROCONTROL Policy

- Status of EUROCONTROL
- Governed by rules and regulations
- Growing awareness with regard to software and its protection.
- 1995 intellectual property rights guidelines established



IPR Policy Guidelines

- Software developed by or on behalf of EUROCONTROL becomes its property
- Software created in co-operation programmes becomes joint property of the parties involved.
- EUROCONTROL tries to obtain all user rights for background software.

Licensing

- to Member States subject to licence agreements and usually free of charge
- to third parties restricted licences against fees

Intellectual Property Advisory Group monitors the application of the Guidelines



EUROCONTROL and OSS

EUROCONTROL is in very early stages.

Some staff members strongly promote open source software.

EUROCONTROL as an international organisation is not free.

Nevertheless things are on the move:

- Technical documents freely available on the Internet
- Some software/tools is available free of charge (though not totally freely)
- ADA Rule Controller



Experience with sale of software

- Selling and commercialising of software is not prime objective.
- Few outright sales of software licences
- Some deals in contract negotiations where ownership has been left with the supplier
- No competition with industry
- Pre-existing proprietary software
- Contractual and legal restrictions
- Ensure that third parties are not patenting inventions based on our ideas



Open Source in ATM

- ATM works in a highly safety critical environment
- Open source developments can be very quick (perhaps too quick)
- Warranty/liability issues
- special skills and expertise
- contractual and/or legal restrictions



Open Source in ATM

quick efficient change

cheap

No vendor lock-in

 Differentiation between background and foreground software becomes less important



Open Source Software in R&D

- No change from a procurement/contract point of view
- inform suppliers aware

Conditions to be successful:

- active, motivated and capably community
- well known easily accessible forum / portal
- Guidance and administration (neutral, competent and reactive/proactive).
- Involvement of ATC entities

A role for EUROCONTROL?



Conclusion

- OSS is an interesting concept
- worth further studying
- EUROCONTROL is starting to direct its attention to OSS
- R&D and Experimental Centres predestined to start

