

FLOSS in Government: Findings from studies

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EU policy

- EU has funded several hundred research projects related to free software
- European Commission itself develops free software, but only recent moves towards official policy on this
- For eGovernment, free software is seen as a way to achieve “Lisbon goals”, by providing access to services for everyone regardless of platform or technology
- Open Source Observatory europa.eu.int/idabc/oso/
– (OSOR.eu)

EU policy

- No EU policy on research output
- EC DG Research Expert Committee on “IPR Policies for ICT-based research” recommends free software licences for software resulting from public funds (2004)

European countries

- Published policies for consideration / encouragement of free software: Sweden, UK, Belgium, Germany, France, Spain, Italy, Estonia, Finland, Lithuania, Netherlands
- Mandating open standards: Denmark, Netherlands
- Major local government migrations: almost all EU countries

Why they choose free software

- Value for money: local governments (tighter budgets); also, developing countries;
- Security: US National Security Agency developed Security Enhanced *Linux*; similar reasons in Germany, China...
- Transparency: Public authorities should provide full transparency and control to the public: Brazil; Extremadura. Australian voting system (GPL free software).

FLOSSPOLS Govt Survey

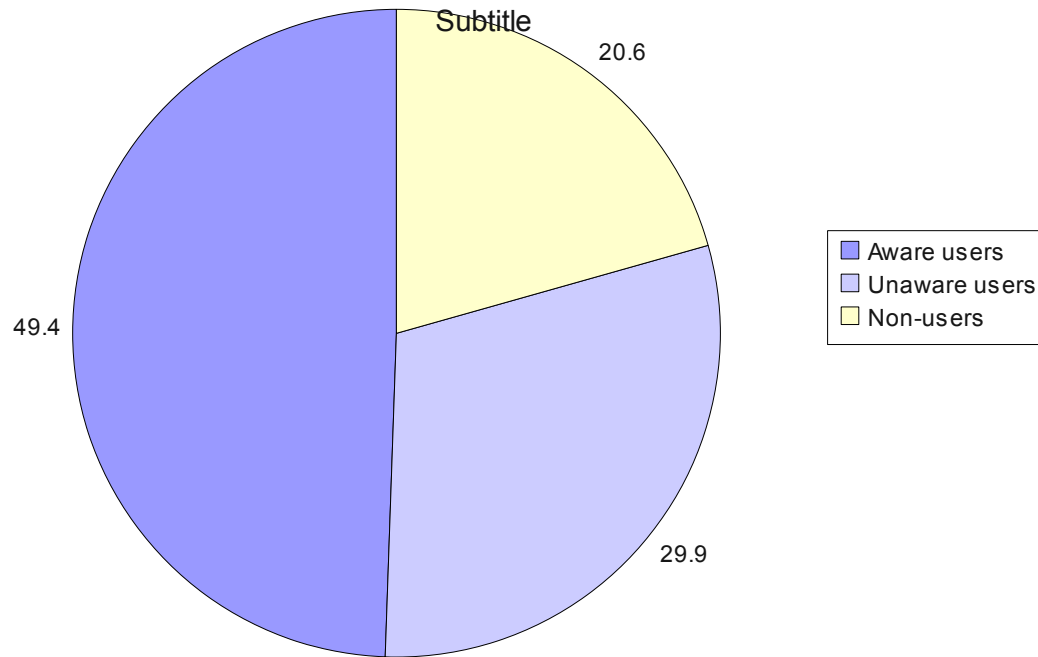
- Local / regional govt authorities
- Phone + web-based survey
- Largest survey of govt use of FLOSS worldwide
- 13 EU countries (including EU25)
- Questionnaire / phone calls in 10 EU languages
- 4138 govt authorities individually addressed, + open questionnaire distributed in some countries
- Late 2004 – early 2005

Govt Survey response

- 955 respondents
- Austria, Belgium, Czech Republic, Denmark, France, Germany, Greece, Italy, Netherlands, Poland, Spain, Sweden, UK
- Response rate varies across countries from 51% to 6%, average of national response rates: 29%
- Non-respondent follow-up analysis carried out to estimate self-selection bias; this bias varies by country

Findings: frequencies

Share of respondents using FLOSS (%)



Findings: frequencies

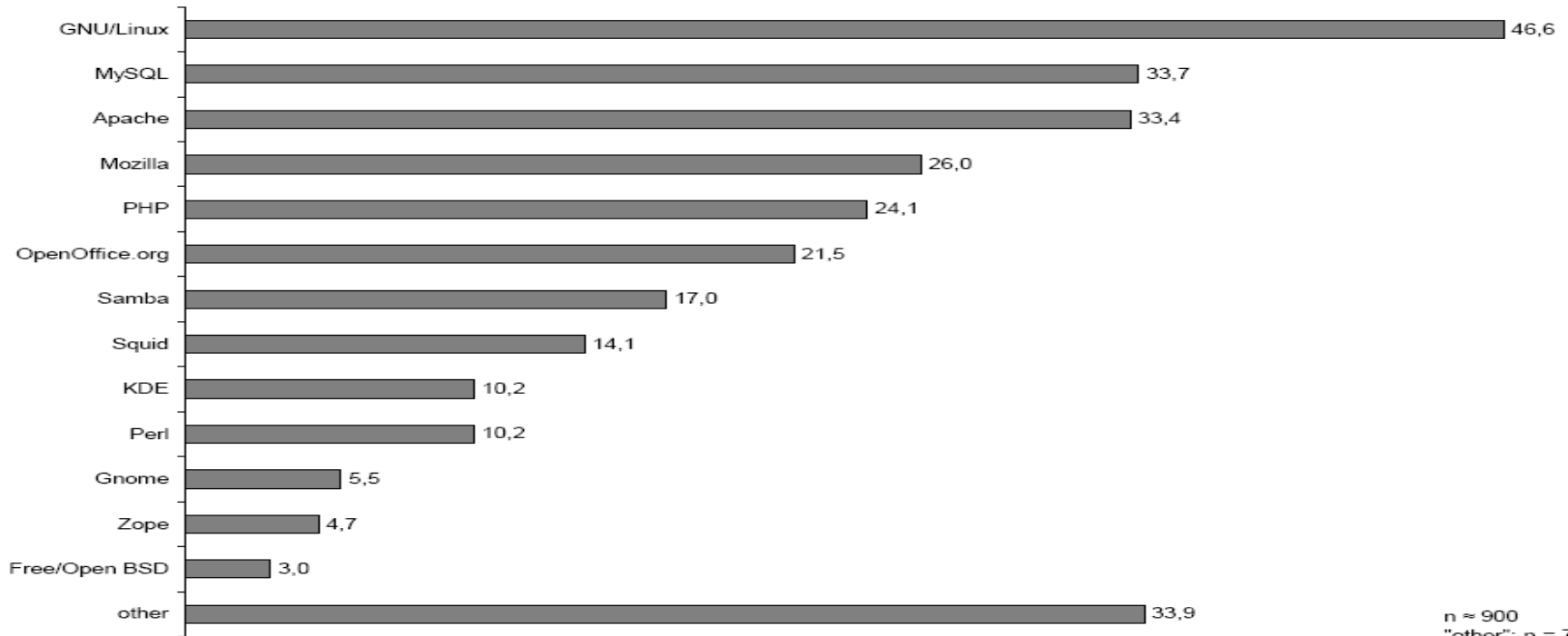
Extent of use (among aware users)

Use of FLOSS		Percentage
on the PC	(almost) completely	1.6
	partially	16.3
on the servers	(almost) completely	3.8
	partially	40.3
experimenting in pilots		20.3

Findings: frequencies

Applications used, % of total

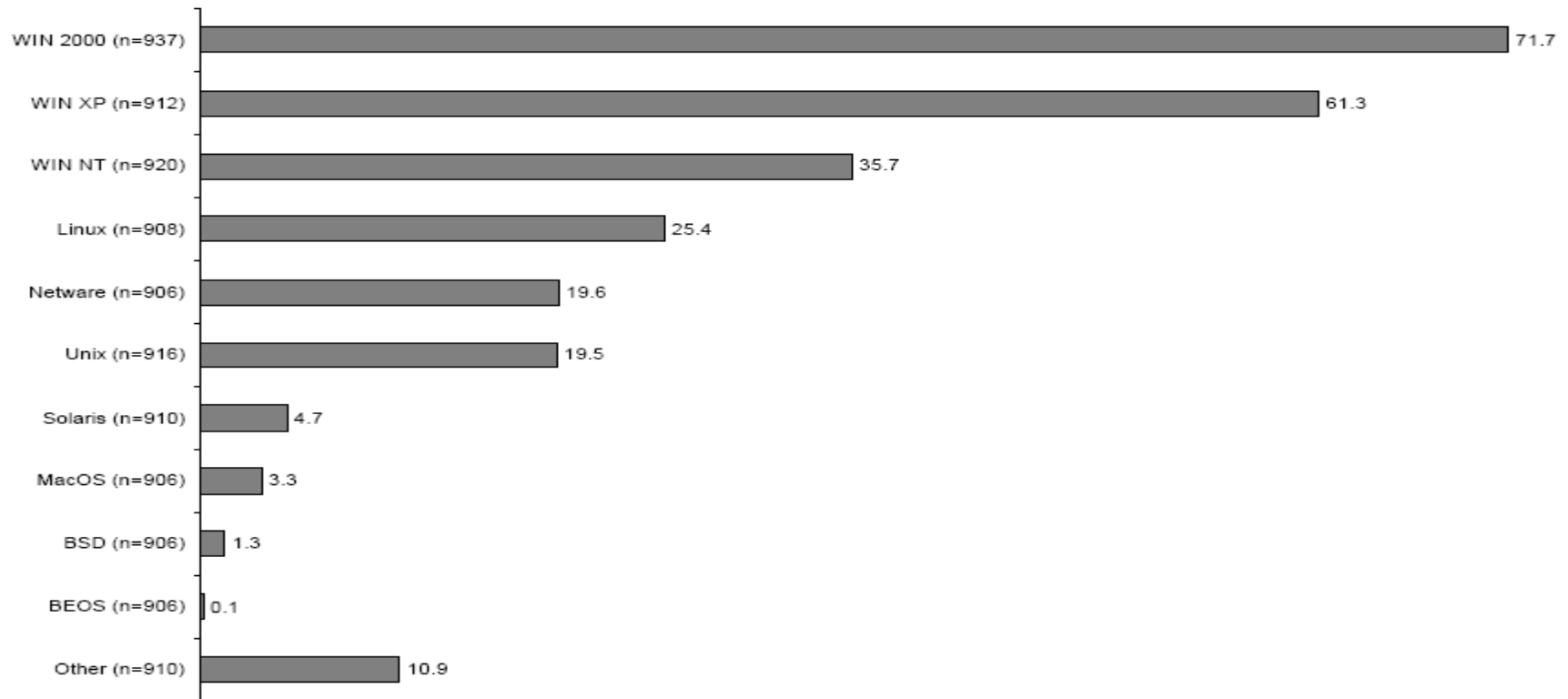
(including those who say they don't use FLOSS - unaware users)



n ≈ 900
"other": n = 759

Findings: frequencies

“Basis of your IT system”, % of total



Findings: patterns

	Type of FLOSS usage in organisation			
Useful to extend FLOSS in organisation?	aware usage	unaware usage	non-usage	Average
yes	69.9	30.2	38.3	51.5
no	11.0	31.6	28.1	20.7
I don't know	19.1	38.2	33.7	27.8
Total	100	100	100	100

p < 0,001

Contingency Coefficient: 0,349

n = 953

Awareness of FLOSS leads to increased willingness to use it regardless of current use/non-use.

27% of all current users and 22% of all users who want to increase FLOSS use want a complete migration away from proprietary sw.

Obstacles to use

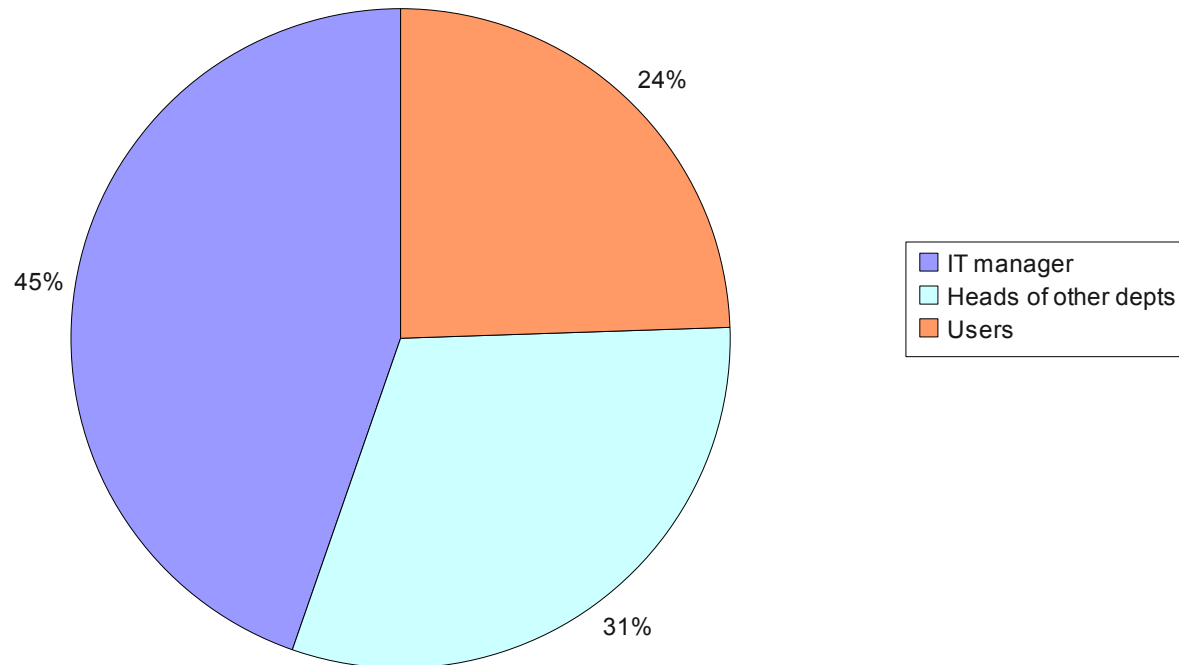
- Willingness to change (inertia)
- Fears (not justified?):
 - Lack of support
 - Expensive training
- Vendor lock-in
- Budget cycles

Obstacles to use

- Willingness to change (inertia)
- Fears (not justified?):
 - Lack of support
 - Expensive training
- Vendor lock-in
- Budget cycles

Decision makers

Who is most important in the IT purchase decision?



Fears

	Total	<i>Aware users</i>	<i>Unaware users</i>	<i>Non-users</i>
Easier to customise	0.26	0.45	0.21	-0.12
Easy to combine with proprietary software	0.18	0.33	-0.03	0.09
More reliable	-0.15	0.03	-0.29	-0.41
Easier to use	-0.36	-0.36	-0.31	-0.44
Source code not enough, price important	0.40	0.41	0.35	0.44
Lack of technical support	0.12	-0.02	0.43	0.01
Training is expensive	0.10	-0.07	0.35	0.15
Don't want to be the first to adopt FLOSS	0.03	-0.18	0.31	0.12

Positive values reflect agreement with the statement, negative values disagreement. Mean values are shown, but variation within usage categories (std dev.) is quite high,

Fears and initiative

		"It is too hard for my organisation to find companies that provide technical support for open source software"			
		I disagree	neutral	I agree	Total
"Migrating to open source software makes sense only if other organisations like mine do it first"	I disagree	69.3	17.5	27.8	38.3
	neutral	12.0	55.5	13.1	24.7
	I agree	18.7	27.0	59.1	37.0
	Total	100.0	100.0	100.0	100.0

p < 0.001

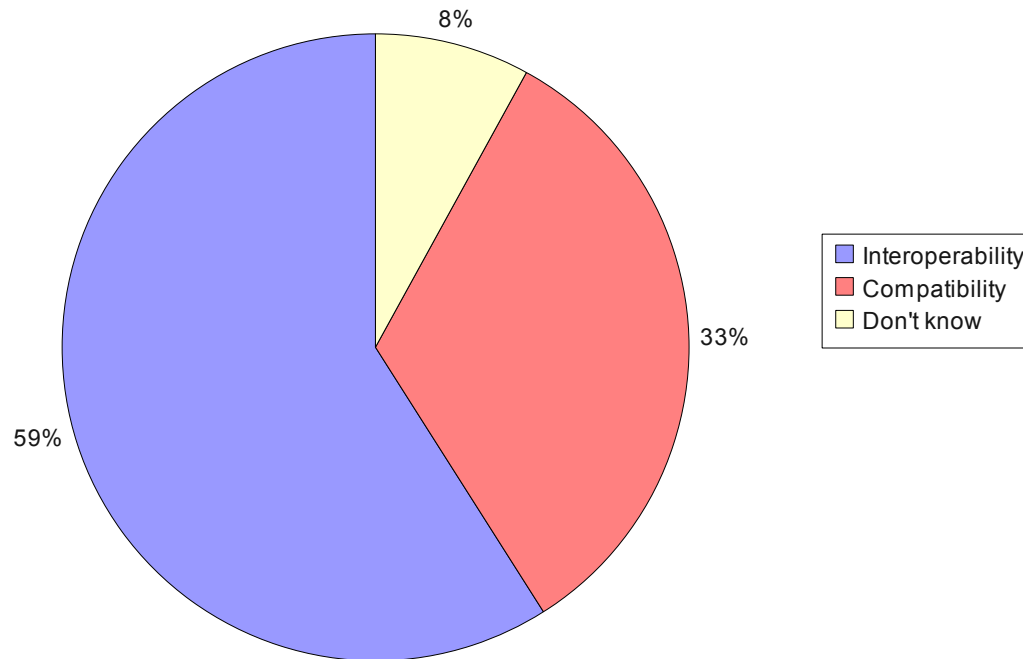
contingency coefficient: 0.517

n = 930

Fear of a lack of technical support closely related to the first mover problem. Countries where technical support exists (or is perceived to exist) face less "first mover" reluctance.

Vendor lock-in

Which is more important for new software?



Interoperability = ability to work with software from other producers
Compatibility = ability to work with previously procured software
Demand for interoperability strongly correlated with aware FLOSS use

Vendor lock-in

	Useful to increase share of FLOSS in your organisation?		
Too dependent on vendors?	Yes	No	Average
Yes	53%	30%	44%
No	43%	66%	49%

Strong correlation between sense of vendor dependence and future FLOSS use.

The share of respondents saying they are too dependent on vendors declines among users with greater extents of FLOSS use.

Vendor lock-in

Current non-users only	Useful to increase share of FLOSS in your organisation?		
Too dependent on vendors?	Yes (future adopters)	No (persistent non-users)	Average
Yes	58%	32%	45%
No	39%	66%	51%

Strong correlation between sense of vendor dependence and future FLOSS use – among current non-users (including unaware users).

Vendor lock-in: procurement

- Anti-competitive public tenders:
 - Compatible with named platforms
 - Explicit proprietary products named

Budget cycles

- Any migration can require initial costs: true of FLOSS, true of upgrading to newer Windows
- Costs (e.g. training) are in the first year
- Savings come in later years
- Budgets are calculated for each year!

Budget cycles

- 3 year budgets would allow easy migration to FLOSS
- 1 year budgets make it more difficult
- Exceptions (high costs) are allowed for upgrading to new versions of Windows, Office – because “everyone does it”
- Exceptions (high costs) are more difficult for migration to FLOSS even if cost savings will follow later, because “everyone doesn't do it”

Findings from FLOSSPOLLS survey

- *Some* FLOSS use exists in about half of EU local government authorities
- *Most* FLOSS use is still peripheral or quite limited (e.g. partial use on servers)
- Demand exists: 70% of users and 38% of non-users want to increase future FLOSS use
- Demand for interoperability drives FLOSS; compatibility (vendor lock-in) works against it.

Findings from FLOSSPOLLS survey

- Perceived vendor dependency, the need for customisation and perceived high licence fees are also strong drivers for FLOSS
- Fears of high training costs and lack of support lead to a “first adopter” problem among non-users. These fears may be misplaced as they are not shared by most current FLOSS users.
- FLOSS use is related to reducing workload, allowing IT administrators to manage as much as 35% more PCs than non-users of FLOSS.

Production of FLOSS

- 7% of Dutch public organisations contributed to FLOSS projects
- 12% possessed software that could have been shared with other organisations under the conditions of a Free Software / Open Source Software license

Source: MERIT surveys for Dutch govt OSOSS programme, 2003, 2004

Production of FLOSS

- 10 % of the respondents own software that has been or could be released as OSS
- 54% of this software is “general purpose software”
- 45 % is “specialised software”
- 27 % own “specific PA software”
- 38 % developed this software themselves
- 33 % have contracted somebody / a company to develop this software

Source: 2006 MERIT/DG INFISO survey of govt production of FLOSS,
www.publicsectoross.info

Policy recommendations

Policy recommendations to further involvement of govt in FLOSS:

- Increase awareness of FLOSS
- Highlight best practices and case studies
- Encourage experimentation in pilot projects
- Strengthen requirements for interoperability
- Provide platforms and support for collaborative development of FLOSS

Increase awareness of FLOSS

- Non-users who are aware of FLOSS fear it less than unaware *users*
- *Awareness of FLOSS* alone is clearly correlated to more positive perception
- Awareness leads to willingness to use FLOSS
- **Recommendation: increase awareness of FLOSS; this leads to clearer, informed choices (...which seems to favour FLOSS)**

Best practices, case studies

- Organisations feel their needs are unique
- Reluctance to be first among peer organisations to implement FLOSS
- Learning about the experiences of peers likely to increase FLOSS use
- **Recommendation: highlight FLOSS best practices, case studies, showing diversity of organisations and usage types**

Encourage pilot projects

- Experience with FLOSS correlated to positive views of FLOSS
- Increased breadth and depth of use correlated to decreased fears and increased appreciation
- **Recommendation: encourage pilot projects and experimentation with FLOSS use; otherwise choices are based on blind fear, not informed by experience**

Require interoperability

- Awareness and appreciation of open standards and interoperability correlated with increased FLOSS use
- Widespread preference for “compatibility with previously purchased [proprietary] software” ensures lock-in to vendors
- Implicit preference for past vendors
- **Recommendation: require preference for interoperability, exclude compatibility with previously purchased software**

More information, news

- FLOSSPOLS: <http://flosspols.org>
- Study of FLOSS release by public sector:
 - publicsectoross.info
- EU Open Source Observatory:
<http://europa.eu.int/idabc/oso/>
- → Open Source Observatory & Repository
www.OSOR.eu