ARE SWISS PUBLIC ORGANIZATIONS FOLLOWING GOOD PRACTICE STANDARDS WHEN PUBLISHING OPEN DATA? AN EMPIRICAL INVESTIGATION

Auriane Marmier (PhD Candidate)
Prof. Tobias Mettler

UNIL | Université de Lausanne
Faculté de droit,
des sciences criminelles
et d'administration publique

EGPA/IIAS
European Group
for Public Administration

UNIL | Université de Lausanne

OGD PLATFORM

- Development of OGD Platform
  - Opendata.swiss created in 2016
  - Creation of OD platform ≠ successful OD utilisation
- If poor data quality ►no use of data

Published data must be comprehensible, complete, consistent, and machine-readable (Janssen, Charalabidis et al. 2012)

- How to measure the quality of the data

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10 PRINCIPLES

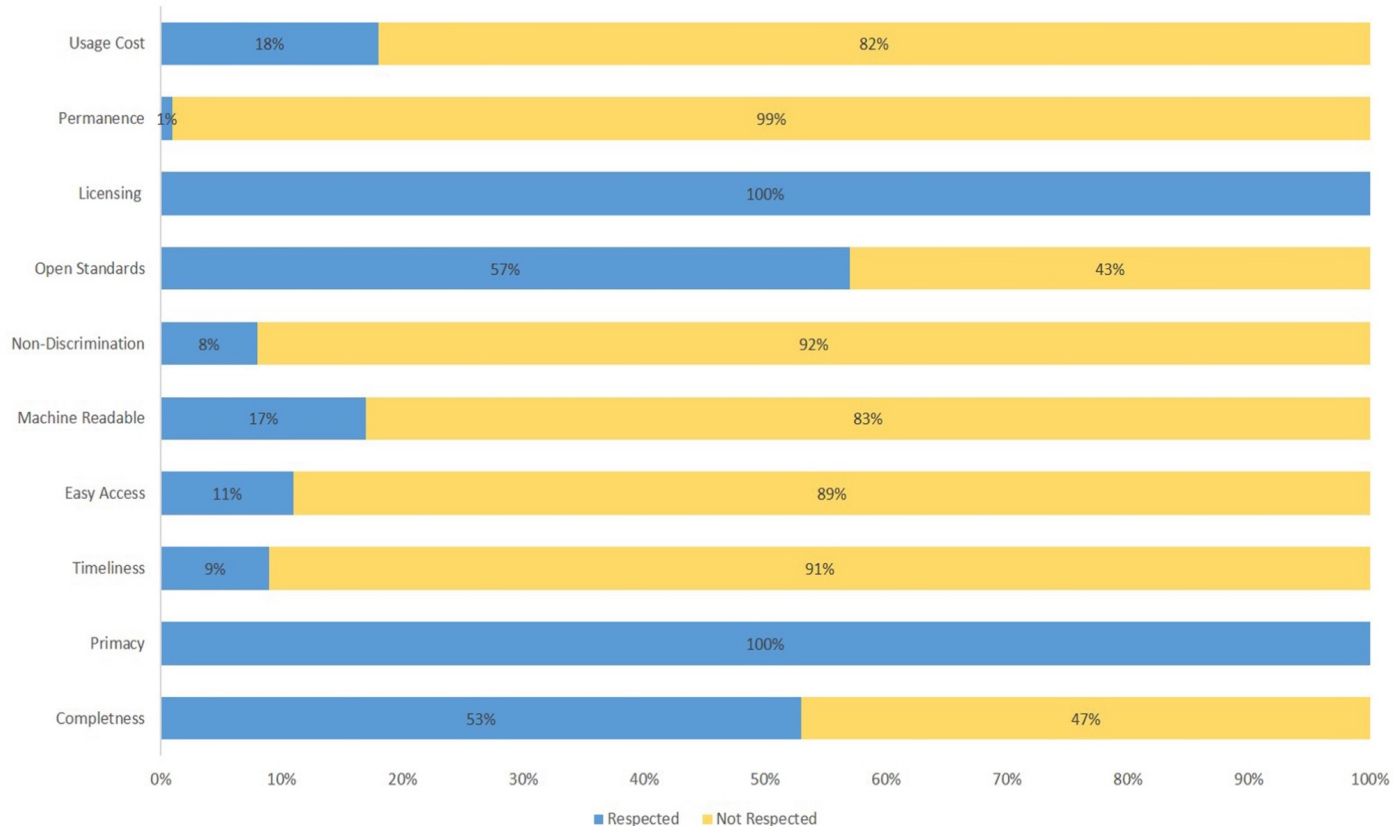|	
#1 COMPLETENESS	Resources published on OD platforms should contain all raw information and metadata defining and explaining its content.
#2 PRIMACY	Resources published on OD platforms should also include the original information released by the government.
#3 TIMELINESS	Resources should be available to the public in a timely manner.
#4 EASY ACCESS	Resources published on OD platforms should be easy to find and download.
#5 MACHINE READABLE FORMAT	Resources should be stored in a machine-readable format (i.e. processable by a computer)
#6 NON-DISCRIMINATION	Resources published on OD platforms should be accessible without having to identify oneself (e.g. login) or providing a justificatory reason.
#7 OPEN FORMAT	Resources should be usable without proprietary software.
#8 OPEN LICENSING	Resources published on OD platforms should use an open licensing model.
#9 PERMANENCE	Resources published on OD platforms should be accessible by machines and humans over time.
#10 USAGE COST	Resources should be available for free.

PROBLEM STATEMENT

- No solution to measure data quality

- Some aspects of the open data
  - Global Open Data Index
  - Open Data Barometer

- Compliance Index

Research question
Are the Swiss public organizations following good practice standards when publishing?

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ADHERENCE TO GOOD PRACTICE STANDARDS

Standard	Respected	Not Respected
Usage Cost	18%	82%
Permanence	1%	99%
Licensing	100%	
Open Standards	57%	43%
Non-Discrimination	8%	92%
Machine Readable	17%	83%
Easy Access	11%	89%
Timeliness	9%	91%
Primacy	100%	
Completness	53%	47%

ADHERENCE TO GOOD PRACTICE STANDARDS (2)

	Completness	Primacy	Timeliness	Easy Access	Machine Readable	Non-Discrimination	Open Standards	Licensing	Permanence	Usage Cost
commune	75%	100%	32%	61%	35%	33%	52%	100%	5%	86%
canton	80%	100%	21%	9%	31%	14%	33%	100%	0%	26%
confederation	40%	100%	1%	1%	9%	0%	65%	100%	0%	1%
other	83%	100%	0%	5%	3%	1%	74%	100%	2%	11%
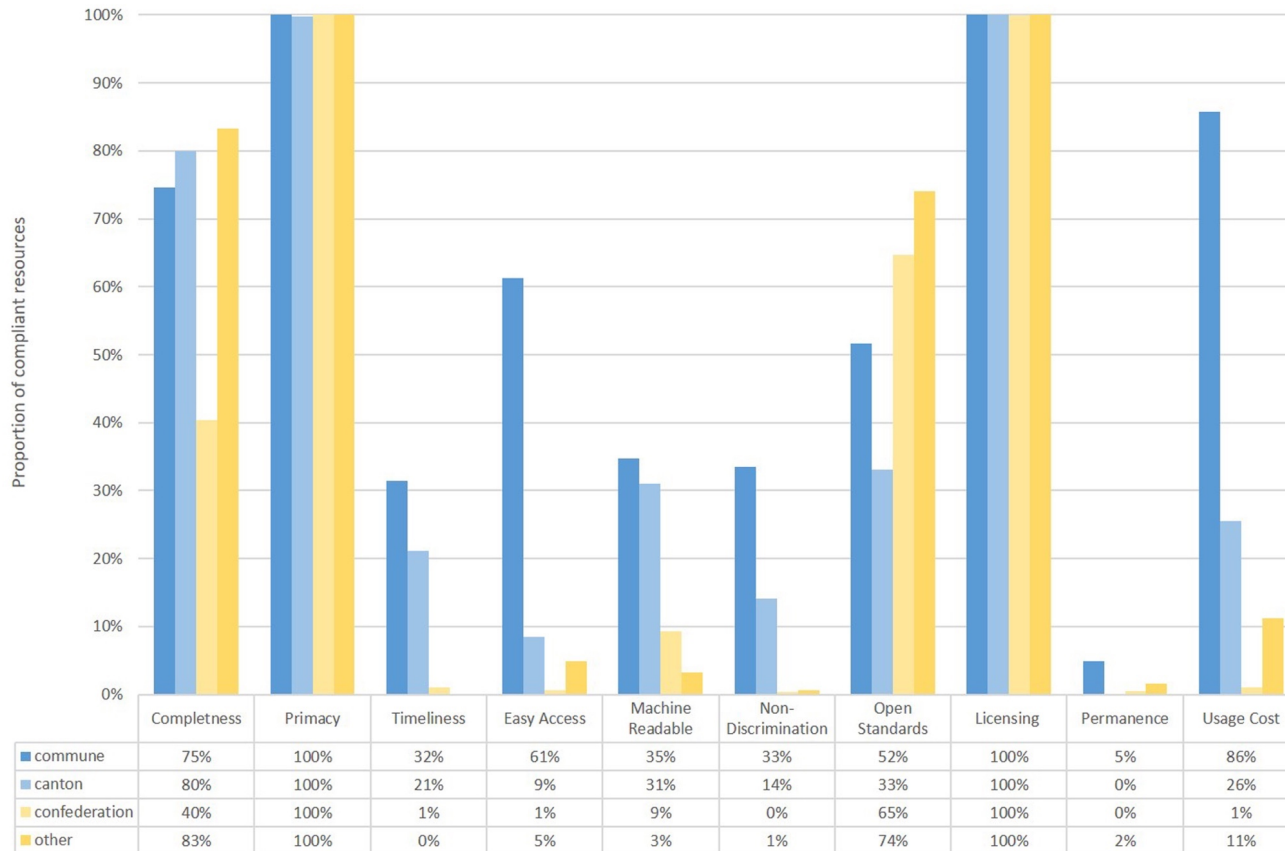
ADHERENCE TO GOOD PRACTICE STANDARDS (3)

Principles: OGD Categories:	Completness	Primacy	Timeliness	Easy Access	Machine Readable	Non-Discrimination	Open Standards	Licensing	Permanence	Usage Cost
administration	83%	100%	4%	34%	36%	23%	53%	100%	13%	50%
agriculture	50%	100%	3%	5%	11%	4%	53%	100%	1%	6%
construction	44%	100%	8%	14%	12%	5%	47%	100%	5%	18%
crime	59%	100%	0%	0%	17%	0%	68%	100%	1%	3%
culture	64%	100%	1%	5%	14%	3%	64%	100%	4%	11%
education	27%	100%	1%	3%	6%	2%	64%	100%	1%	6%
energy	60%	99%	0%	3%	8%	2%	21%	100%	0%	8%
finances	83%	100%	54%	6%	4%	2%	20%	100%	7%	13%
geography	61%	100%	2%	22%	33%	27%	43%	100%	0%	49%
health	54%	100%	6%	4%	6%	2%	80%	100%	0%	6%
industry	21%	100%	1%	0%	5%	0%	55%	100%	1%	2%
legislation	92%	100%	0%	8%	32%	0%	56%	100%	5%	15%
mobility	68%	100%	3%	25%	10%	8%	50%	100%	0%	30%
national-economy	57%	100%	1%	14%	13%	3%	66%	100%	2%	16%
politics	84%	100%	4%	5%	39%	2%	50%	100%	3%	8%
population	34%	100%	3%	6%	9%	1%	60%	100%	0%	7%
prices	48%	100%	2%	3%	10%	2%	79%	100%	0%	9%
public-order	91%	100%	0%	1%	34%	1%	54%	100%	3%	8%
social-security	48%	100%	0%	10%	14%	7%	62%	100%	0%	16%
statistical-basis	41%	100%	1%	1%	2%	1%	91%	100%	0%	2%
territory	71%	100%	1%	17%	28%	12%	48%	100%	0%	24%
tourism	31%	100%	0%	3%	6%	3%	73%	100%	0%	10%
trade	17%	100%	0%	0%	0%	0%	58%	100%	17%	67%
work	55%	100%	3%	0%	17%	0%	68%	100%	0%	2%

INTERPRETATIONS AND CONCLUSION

- Principles are not equally implemented by data providers

- Communal organizations more compliant

- The adherence to good practice standards is rather low

FUTURE RESEARCH

- Automate the analysis

- Improve methodology

- Monitor results through the years

Q&A?

Contact
Auriane Marmier

Etudiante Diplômée
& PhD Candidate

Université de Lausanne
Bâtiment IDHEAP
CH-1015 Lausanne
+41(0) 21 692 69 54
auriane.marmier@unil.ch

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