## Study on Application Profiles - title to be defined

Mariana Curado Malta Ana Alice Baptista

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## -PAPER UNDER CONSTRUCTION-

We selected a total of 72 Application Profiles (AP), the oldest from 2001 and the most recent from 2012, however only 61 of them where studied because of the lack of all necessary elements. These AP were categorised per domain of application. On Table 1 we can see the frequency of AP production per domain.

Application Domain	#	%
Learning Objects	28	$45,\!90\%$
Cultural Heritage	7	$11,\!47\%$
Agriculture	6	$9,\!84\%$
Public System Information	5	8,20%
Libraries	4	6,55%
Cross-domínio	3	4,92%
Audio/Video/Multimedia	2	$3,\!28\%$
Scholary Communication	2	$3,\!28\%$
Collections	1	$1,\!64\%$
Science	1	$1,\!64\%$
Other	2	$3,\!39\%$
Total	61	100,00%

Table 1: Frequency of AP per application domain

We have registered every metadata scheme (MS) used in the analised AP. Like the AP, we have organised these MS per domain of application. The total of MS found were 44 and in Table 2 we can see the percentage of MS per domain.

Table 3 shows the frequency of every MS on the analised AP. We only browse the MS over 1% of frequency, all the remaining MS under 1% are under the "other" topic.

Some fo the goals of this study were. (i) to understand which are the MS that are being used in the metadata community; (ii) to understand if the Singapore Framework for Dublin Core Application Profiles defined in Baker et al. (2008) has been used as a rule in the AP development. We have found out that: (i) there are two MS that are the most used: Dublin Core MS (dc and dcterms) and IEEE-LOM MS. The IEEE-LOM MS has the learning objects domain as a well defined domain and it is not used outside this domain; Dublin Core

Application Domain	#	%
Libraries	11	25,00%
Cross-domain	6	$13,\!64\%$
Public Service Information	6	$13,\!64\%$
Learning Objects	4	9,09%
Collections	3	6,82%
Audio/Video/Multimedia	2	4,55%
Images	2	4,55%
Conecting People & Comunities	2	4,55%
Scholary Comunication, Editors	2	4,55%
Agriculture	1	2,27%
Electronic Commerce	1	2,27%
Organisations Definition	1	2,27%
Science	1	2,27%
Other	2	4,55%
Total	44	100,00%

Table 2: Frequency of the used Metadata Schemes per application domain

MS	#	%
dc	35	24,82%
IEEE LOM	27	$19,\!15\%$
dcterms	21	$14,\!89\%$
agls	6	4,26%
MODs	4	2,84%
Vcard	3	$2,\!13\%$
IMS	3	$2,\!13\%$
foaf	3	$2,\!13\%$
agmes	3	$2,\!13\%$
MIX	2	1,42%
MARC	2	1,42%
LRE AP	2	1,42%
dc collections	2	1,42%
Darwin Core	2	$1,\!42\%$
Other	26	18.42
TOTAL	141	100,00%

Table 3: Frequency of the used Metadata Schemes

MS have proven to be completely cross-domain and are the most used by the metadata community (39.71% of usage). Having the IEEE-LOM MS many common properties with the Dublin Core MS, and being the latter the pioneer in the field, Dublin Core MS are therefore the big standards in the metadata community; (ii) that the international community has not yet actually joined the Singapore Framework for Dublin Core Application Profiles. After four years of defining this document, from the 61 AP selected, only 3 fully follow this recommendation, they are: (i) SWAP: The Scholary Works Application Profile; (ii) IAP: Images Application Profile (developed over SWAP) and; (iii) VMAP: Variazioni Musical Dublin Core Application Profile.

## References

[Baker et al., 2008] Baker, T., Nilsson, M., and Johnston, P. (2008). The singapore framework for dublin core application profiles. http://dublincore. org/documents/singapore-framework/. Accessed in 26.06.2011.