

Paying is not enough

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Overview



- > Publications in Science
- > Publishing and Libraries
- > Workflow considerations
- > openCost from a Workflow Perspective

Role(s) of Publications

- > Exchange ideas
- > Spread knowledge
- > Further communication
- > Claim priority
- > Gain reputation
- > Justify funding
- > Evaluate research
- > Make money
- > Mine data

Newton to Hooke, 1676-02-05

"If I have seen further it is
by standing on ye shoulders of
giants."¹

¹ Original: Bernhard von Chartres, ca. 1120



A Scientists Point of View

- > I have to **write** papers
...for people to read me.
- > I have to ensure to **get read**
...to get cited.
- > I have to **report** my
papers
...to get funded.
- > I have to **get funded**
...to do science.

I have to key in *the very same data* into

- 1 the **preprint** submission so people read me early
- 2 the **publishers** system to make citations count
- 3 the **funding application** form to finance the publication
- 4 the local **repository** to ensure broad Open Access
- 5 the institutions **CRIS system(s)** to get the credits
- 6 the universities **Bibliography**
- 7 the **web pages** and **media** etc. to spread the word
- 8 the **funders** evaluation system(s)



Libraries are Service Facilities

Interaction points:

- 3 the funding application form
- 4 the institutional repository
- 5 the local CRIS system
- 6 the university Bibliography
- 7 the web pages and media etc
- 0 interfaces between systems

Reduce manual input!

Reuse data!

*Where is the sweet spot?
What is a proper workflow for the whole publishing process?*



3 The Funding Application Form

What happens, if the funding of publication costs is not approved?

The author(s) will

- | | |
|-----------------------------------|---------------------------|
| 1 ...be grateful for our service | 1 ...not be amused |
| 2 ...not publish | 2 ...find a work around |
| 3 ...use another venue | 3 ...handle it themselves |
| 4 ...happily fill in another form | 4 ...waste a lot of time |

"Oh, indeed! You're right! n***** is too expensive! I'll publish in some other journal, they'll probably accept it. Just a few more referees and another half a year. Time well spent.
Oh, again funding is not approved?! Well..."

It is payed anyway,
but way more expensive.

We create "APCs in the wild"...



4 The Institutional Repository

- > Mints and supplies **persistent identifiers**
- > Ensures permanent **full text** access
- > Supports many publication types
- > Complies to **funder requirements**
- > Feeds to (some) **funder reports**
- > Uses **standardized** formats / interfaces
- > Allows for **easy data-reuse**
- > submission \approx "application form"?

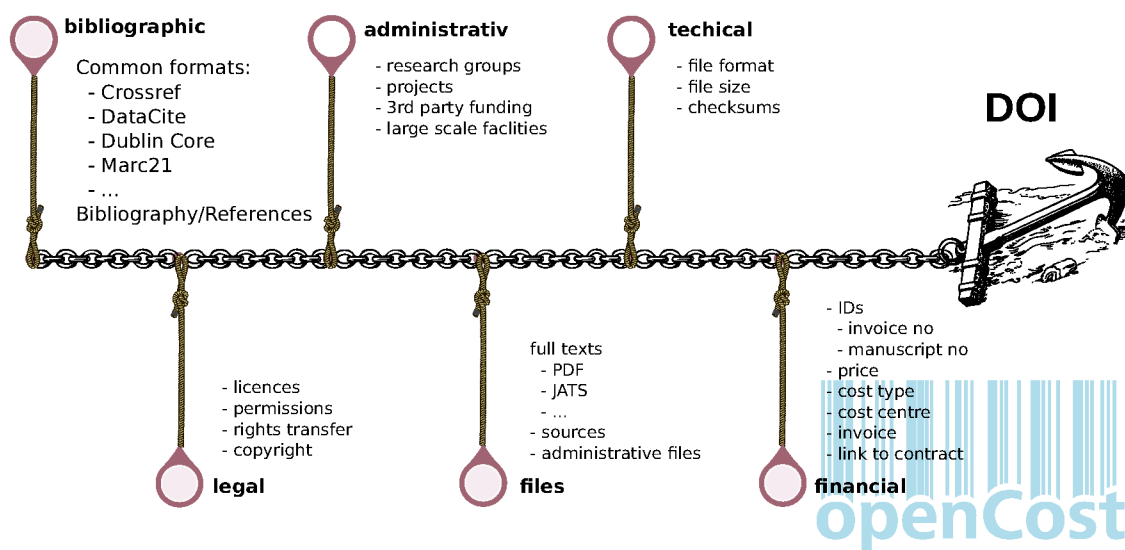
Already holds required data

- > bibliographic description
- > administrative data
- > legal data, licences
- > full text files
- > technical data

Why not...

...just add financial data?

Give me a repository and a persistent ID and...



5 The Local CRIS System Bibliography

/ 6 The

Does it

- ? ...mint and supply persistent ids
- ? ...ensure full text access
- ? ...comply to funder requirements
- ? ...support all relevant publication types
- ? ...supply standardized formats / interfaces

If **no**,
add integration with the
repository.

Probably, center the workflow on the repository.

If **yes**,
it holds holds required data.

Why not...

...just add financial data?



NaN The ILS

- > Allows for **easy budgeting**
- > Already knows how to handle costs
- > Support all relevant publication types

(all you need are diligent cataloguers)

Does not

- > mint and supply persistent IDs
- > ensure full text access
- > comply to funder requirements
- > allow for easy enhancements
- > handle dependent works well

Administrative Tool

Require **interfaces** to the Repository and/or CRIS system to
serve scientists.



The Sweet Spot(s)

- 1 The Repository
- 2 The CRIS system / The Bibliography
(Most likely requires integration with the repository.)
- 3 The ILS
(Always requires interfaces to feed other systems.)
- 4 The "Funding Application Form"



Workflow

Assumption

Every invoice is checked for correctness.

Define,

- 1 a central point to handle all publication-related invoices
(Think buying books, just way more expensive...)
- 2 if and how (internal) cost splitting works
(Allow the library to charge different accounts and cost centres.)
- 3 the most suitable system from a scientists point of view
(Get out most for them.)
- 4 Quality of Service
(A journal is called ...Express or ...Letters for a reason.)

...like for any book...



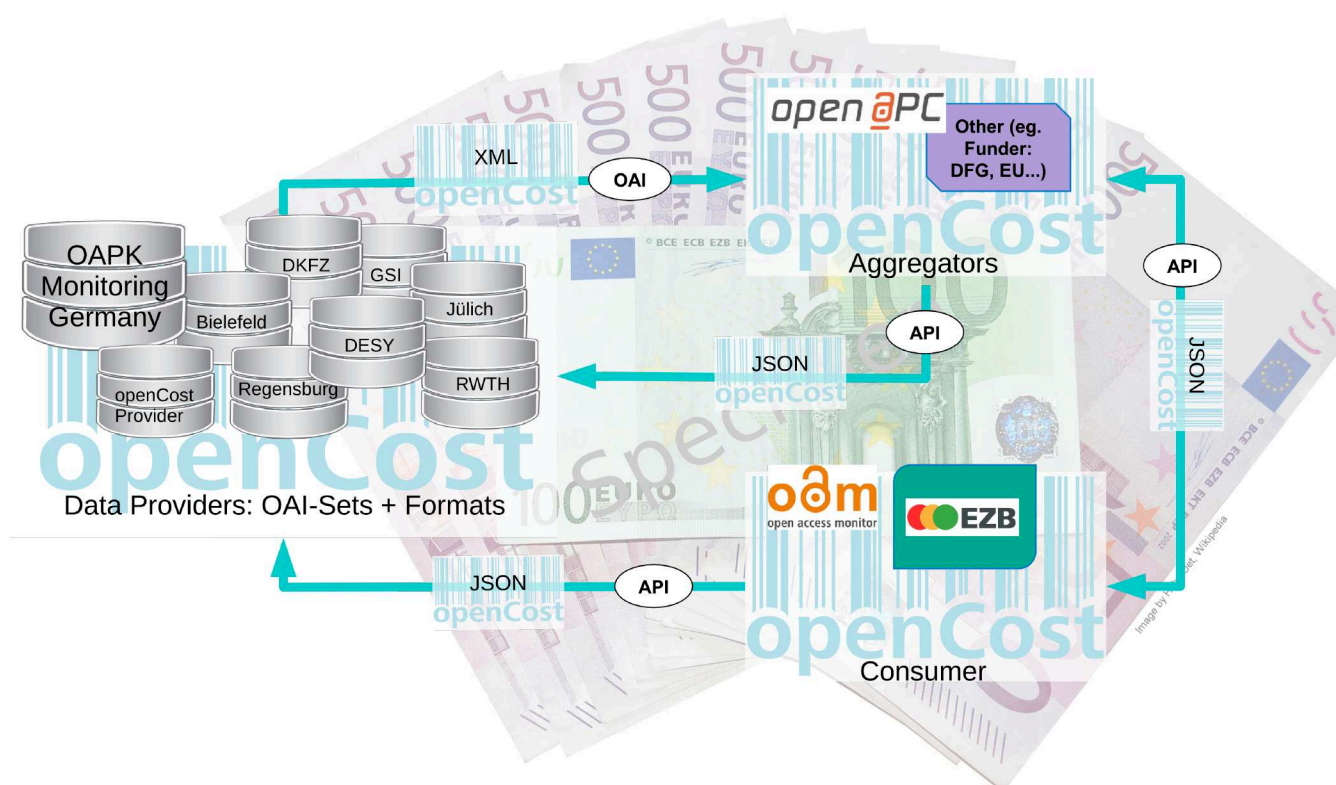
Once an invoice arrives...

- > Check the invoice for correctness
- > Create a record (may be preliminary bibliographic data)
- > Add cost data to the record
- > If a funding application is required: fill it out for your scientists and hand it in
- > Add publishers full text (you are about to buy it...)
- > Add digital invoice as (private) full text
- > Hand the invoice to financial controlling
- > Release the record to Open Access
(according the licence just bought)

Ensure
data is passed on
to other systems
(CRIS, web, funders, cost monitoring...)



Cost Data Cycle



Why OAI-PMH?

This interface is ancient and uncool.

"We use REST and JSON these days, not HTTP and XML..."

- > Widely established
- > Numerous software libraries
- > Stood the test of time
- > Proven to **scale well**
- > Format-agnostic
- > **Aggregator-agnostic**

Who wants the data?

Some aggregator.
Probably, some I am not yet
aware of...

Minimized technical workload at the data
providers.

No need to write individual code for each service.



Data Updates

- > Corrections (e. g. German classics: 3.000 €
→ 3000 €)
- > Add missing records (e. g. taming
APCs)
- > Deleting records
- > Subsequent payments (e. g. DEAL)
- > Refunding (e. g. with prepayments)

OAI ensures to transfer only

- > changed records
- > new records
- > deleted records

It can easily be forced to (re-)retrieve **all** records.

For aggregators...

...updating of records is seamless and efficient.
Data can be transferred **frequently** and
regularly.



Why is openCost defined in XML?

- > embeddable
- > standardized
- > UTF-8 safe
- > allows validation

([opencost.xsd](#))

- > used in many processes
- > OAI-PMH is defined on XML

openCost uses *XML light*

- > type/value constructs
- > no attributes

```
<institution>
  <id>
    <type>ror</type>
    <value>
      https://ror.org/01js2sh04
    </value>
  </id>
</institution>
```

```
"institution": {
  "id": {
    "type": "ror",
    "value":
      "https://ror.org/01js2sh04"
  }
}
```

openCost-XML allows

easy, unambiguous serialization in other formats




Thank you!

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Typeset by lua^AT_EX

