Paying is not enough

Alexander Wagner
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HELMHOLTZ

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 ot 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?

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3 The Funding Application Form

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

The author(s) will

1	…be greatful 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

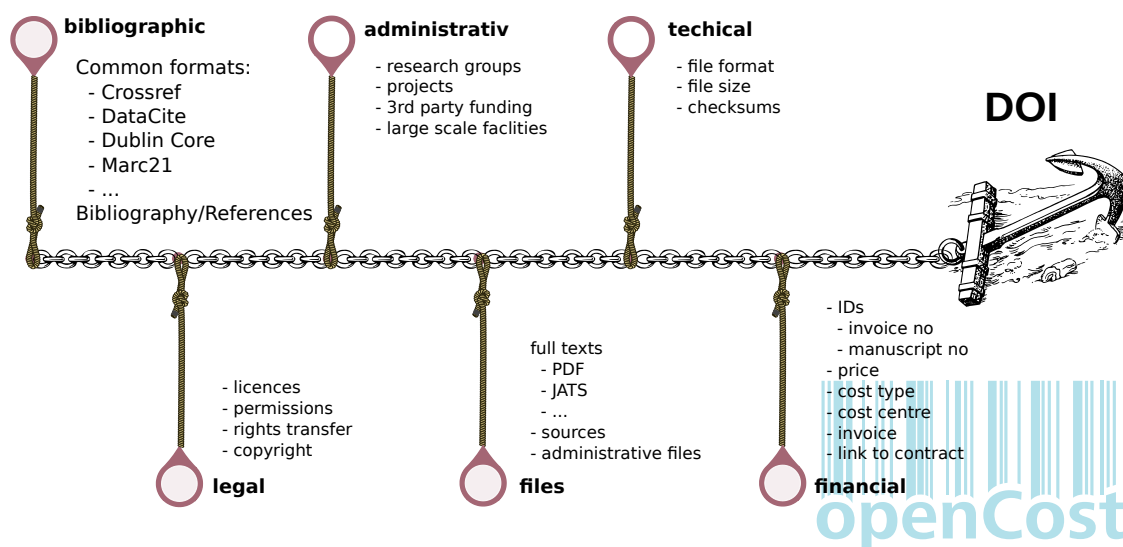> submission ≈ "application form"?

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…

bibliographic

Common formats:
- Crossref
- DataCite
- Dublin Core
- Marc21
- ...
Bibliography/References

administrativ
- research groups
- projects
- 3rd party funding
- large scale faclities

techical
- file format
- file size
- checksums

DOI

- licences
- permissions
- rights transfer
- copyright

legal

full texts
- PDF
- JATS
- ...
- sources
- administrative files

files

- IDs
- invoice no
- manuscript no
- price
- cost type
- cost centre
- invoice
- link to contract

financial

openCost

5 The Local CRIS System / 6 The Bibliography

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.)
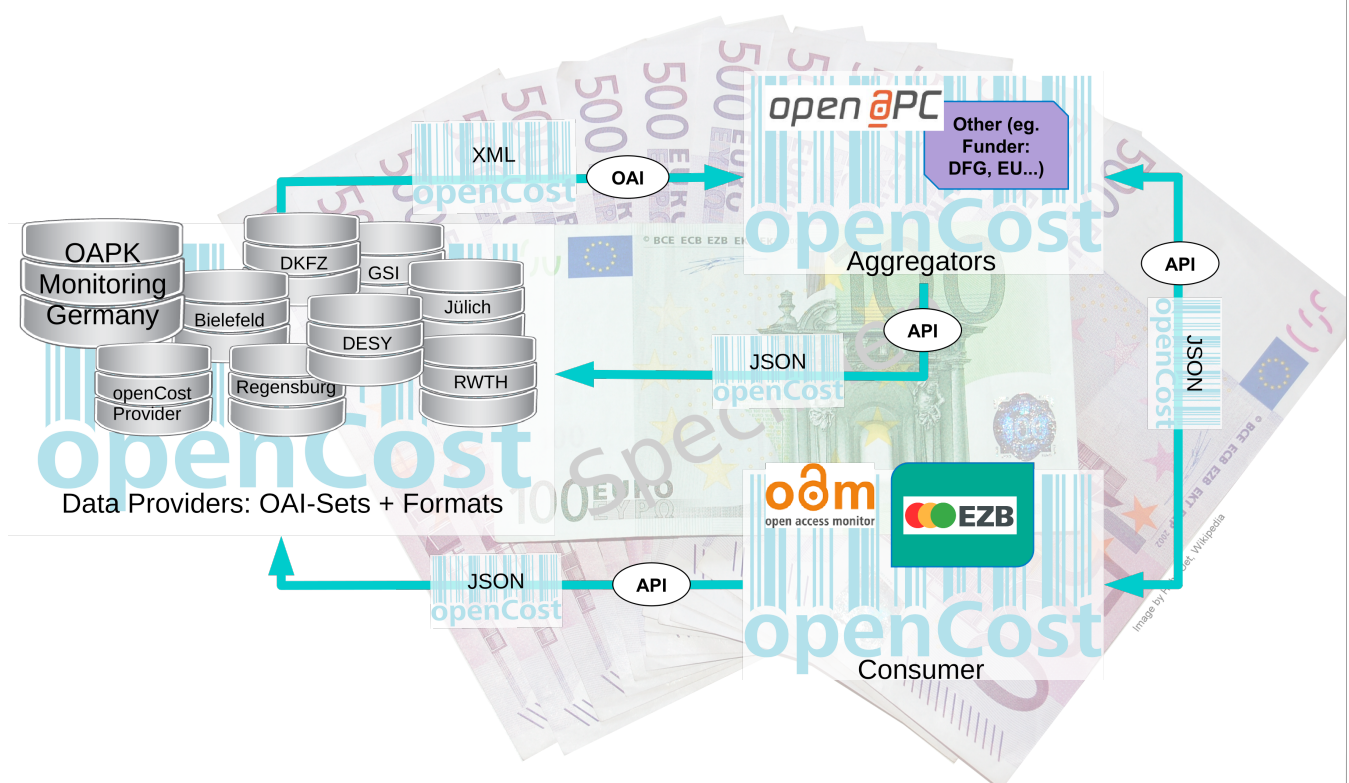
…like for any book…

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 controling

> **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

Data Providers: OAI-Sets + Formats

Aggregators

Consumer

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 neet 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, unambigious serialization in other formats

Thank you!

Contact

Deutsches Elektronen-Synchrotron DESY

www.desy.de

Alexander Wagner
0000–0001–9846–5516
Central Library
alexander.wagner@desy.de
+49–40–8998–1758
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