Luxembourg and the National Infrastructure
Lessons learned from a National Collaboration in Luxembourg to facilitate Open Access Management & drive Open Science

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WE ARE CHRONOSHUB

A leading Open Access Management platform transforming research publishing

- 2017 ChronosHub founded in Copenhagen, Denmark
- 180,000+ Authors using ChronosHub
- 100,000+ Articles processed for Compliance, Open Access Agreement Monitoring, Article Processing Charges and Article Repository deposits per year
- +€5 million Managed per year in Article Processing Charges
WE COLLABORATE WITH ALL STAKEHOLDER GROUPS IN THE RESEARCH ECOSYSTEM
Luxembourg National Research Fund (FNR)

Who we are and what we do

- Main funder of research activities in Luxembourg
- Advise the Luxembourg government on national research policy and strategy
- Plan S funder, supporting Open Access & Open Science, mandating ORCID IDs
### FNR Open Access Policies

**Yesterday, today and tomorrow**

<table>
<thead>
<tr>
<th>Acceptance year</th>
<th>When was the grant accepted?</th>
<th>Which Open Access policy applies?</th>
<th>Most important eligibility criteria</th>
<th>How to pay for publishing fees in/after 2021?</th>
</tr>
</thead>
<tbody>
<tr>
<td>... 2016</td>
<td>Accepted before 2017</td>
<td>None</td>
<td>Fees covered via grant budget</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Accepted between 2017 and 2020</td>
<td>FNR Open Access Policy</td>
<td>Reimbursement through Open Access Fund Call</td>
<td></td>
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<td>2018</td>
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<td>2019</td>
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<td>2020</td>
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<tr>
<td>2021</td>
<td>Accepted in 2021 and later</td>
<td>Plan S FNR Open Access Policy</td>
<td>If published in/after 2021: Direct payment through ChronosHub</td>
<td></td>
</tr>
</tbody>
</table>

- **Plan S FNR Open Access Policy**
  - CC-BY licence
  - FNR-funding acknowledged
  - Repository & no embargo
  - Hybrid: transformative journals only
  - Caps: Hybrid = 1500€, Gold = 2500€

If published in/after 2021:

⇒ Direct payment through **ChronosHub**
THE CHALLENGES

Publishers

- Policies driving new business models
- Complex compliance management
- Manual submissions

Researchers

- Policies driving publishing preferences
- Time-consuming approvals, compliance checks and payments for invoices & agreements
- Manual reporting & funding requests

Institutions

- Policies driving new business models
- Manually populating repositories & CRIS-systems

Funders

- Policies driving publishing preferences
- Manual reporting & funding requests
- Time-consuming approvals, compliance checks and payments for invoices & agreements
## Lessons learned for Funders & Institutions

### Best Practise
- Develop OA Strategy
- Focus on unburdening the researchers
- Centralize OA funds

### Collaboration
- Across internal & external organizational boundaries
- With third parties like submission systems, OA Switchboard, IRs, CRIS, JCT, etc.

### Standardization
- Data standards and formats
- Processes and definitions of terminology (OA vocabulary)
- Flexibility as not one model fits all

### Automation
- Use of Persistent Identifiers (PIDS)
- Ensure FAIR data upon inception
Focus on unburdening the Researcher

THE SOLUTION

1. Journal Selection & Submission
2. Data & Invoice Ingestion
3. Funding Eligibility Check
4. Approval
5. Invoice Payment
6. Reporting & data reuse
   (APC expenditure, agreement monitoring, OA policy compliance, populating CRIS/IRs, OpenAPC, etc.)
Luxembourg National OA Management Infrastructure

Today: New solutions to enable Open Access, FAIR data, and Open Science

Open Access managed through ChronosHub:

Journal Finder
- Directly checks if a journal is compliant with the FNR policy (2017-2020, 2021-)
- Confirms possible FNR funding amount
- Makes national publisher agreements transparent

Manuscript & invoice submission
- Manuscript submission to publisher via ChronosHub (less work, automation upon acceptance)
- Automated ingestion of invoices (directly from publishers, or via email from authors & admins)

Immediate funding eligibility check
- ChronosHub directly and automatically checks funding eligibility of submitted invoices
- No more manual work for compiling reports, or getting funding rejected after publishing

Direct funding
- If eligible, FNR/ChronosHub directly pay the full invoice
- If funding cap is exceeded, FNR receives reimbursement from institution
SEARCHING & FILTERING
You can search and filter more than 45,000 journals on various attributes like subject area, APC-range, OA type and if it’s indexed in journal lists like Scopus, Web of Science and DOAJ. The filters can be customized.

FUNDER COMPLIANCE
Each journal is flagged as compliant or non-compliant with FNR’s policy. ChronosHub currently includes 60 further research funders.

FUNDING ELIGIBILITY
For each journal a message is displayed indicating if it meets FNR’s funding eligibility criteria.

PUBLISHER AGREEMENTS
Each journal displays a customizable message indicating if it is included in any of the national open access agreements, if that covers free publishing, and if there is a quota or a discount.
DATA INGESTION:
EMAIL FLOW for INVOICE SUBMISSION

Live form displayed – no need to login

Invoice form 742124
Fill in the blank fields

Titel
Performance of goats in a detour and a problem-solving test following long-term cognitive test exposure.

Journal
Royal Society Open Science

Funding acknowledgment
Swiss National Science Foundation (SNSF)

Publisher
The Royal Society

Price
APC: 1200 GBP
VAT: 240 GBP
Total: 1440 GBP

Eligibility
- Grants
- Policy
- Funding Scheme
- Grant Authors
- Acknowledgement
- OA status
- License

Success!
You have successfully completed your funding request and you will receive an e-mail confirmation once ChronosHub has processed it.

Grant:
Performance of goats in a detour and...
FUNDING ELIGIBILITY CHECKS

Funding eligibility checks are done automatically upon upload/ingestion of the invoice.

Different criteria can be set up for the different policies (i.e. FNR policy vs FNR’s Plan S Policy).

After ingestion of the invoice via either route, the funding eligibility is displayed on the platform via a traffic light system.
INVOICE APPROVAL

The admin team approves, conditionally approves, or rejects invoices, based on the funding eligibility criteria.

The admins and corresponding authors are informed about any updates or actions required via email notifications.

An overview of approved, rejected, and conditionally approved invoices are available on the platform and can be downloaded in Excel format.

Overview of all articles per approval status

Download to Excel and reuse over API
**Development over time**

*Increase after pilot phase: about 200 APC-invoices and 340 k€ per year*
Extending the national platform across institutions and support research data:

Journal Finder
- Making the Journal Finder public & make clearer policy compliance vs funding eligibility

Manuscript & invoice submission
- Work with institutions to cover all articles (not only FNR funded) and optimize internal processes (e.g. PO numbers issued in different ways at different org units)

Direct funding
- Deposit accounts for each institution to avoid reimbursement

Automated repository deposits
- Collection of AAMs and VoRs and deposit in Zenodo and CRIS/Institutional Repositories (Pure, DSpace).

Support for research data
- Extend support to research datasets, and issue DOIs for grants and DMPs.
QUESTIONS?
GET IN TOUCH

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