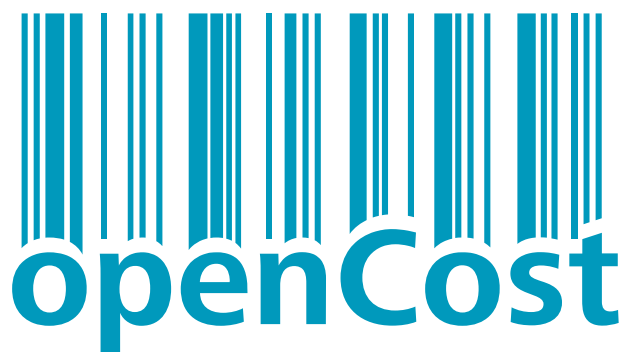


Bianca Schweighofer & Alexander Wagner (Eds.)



The Road to Publication Cost Transparency

Proceedings of the Expert Workshop
Hamburg, October 05th – 07th 2022



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Value Assessment of License Agreements and Publication Cost from a Norwegian Perspective

Jens H. Aasheim¹

Sikt - Norwegian Agency for Shared Services in Education and Research

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Abstract

As the national Open Access coordinator and managing the Norwegian license consortium, Sikt processes a wide variety of data associated with the cost of publishing and agreements. The following will share experiences on acquiring, handling and using cost data.

5.1 Introduction

Presented here is a brief overview of some of the past efforts and current Norwegian activities on the financial aspects of Open Access and research publishing. It is worth mentioning that at the time of writing, a larger and more comprehensive project on this topic is under way. Similar to the French study of the evolution of APC cost and electronic subscriptions [89]. However, the Norwegian project plans on extending to an institutional level as well as the national level. The project aims to establish better and more extensive cost estimates of both Open Access

¹<https://orcid.org/0000-0003-4022-8424>

in Norway, in addition to the wider context of scholarly publication. Including read-only agreements, publishing agreements, APC cost, publication repositories, Diamond OA journals, etc.

Seen in an international context, Norway is a relatively centralised country: There is one main research funder, the Research Council of Norway. The Norwegian government issued national goals and guidelines for Open Access in 2017 [90]. There is a national CRIS (Current Research Information System), as a part of the governments result-based redistribution of research funding [91]. A national publication repository is currently under development, in connection with the national CRIS. And there is also a consortium negotiating and managing license agreements for most public research institutions (universities, university colleges, public research institutes, hospitals, etc.).

Sikt plays an important part in the Norwegian scholarly communications landscape. As well as hosting the national CRIS, and the upcoming joint national publication repository/CRIS. It is also both the national Open Access coordinator, manages the license agreement consortium and the national library consortium. A consequence of this central role is that Sikt also acts as a data hub for lots of relevant information. Gathering and receiving data from a plethora of different sources. Sikt is therefore in a unique position to assess, monitor and analyse both the volume and cost of Norwegian open research publication.

5.2 Transition to Open Access

In 2021 Sikt, in collaboration with Universities Norway, wrote a report on the Norwegian transition to Open Access [92].

As part of the report, Sikt sent out a survey to map how much Norwegian research institutions spend on research journals and OA publishing. In the survey institutions reported what they spend on subscriptions and agreements outside the consortium, as well as APCs and other open access related expenditures. Additionally, Sikt has direct knowledge of agreements negotiated and managed on behalf of its members through the license consortium. When combined, these elements provide a relatively complete picture of the recent historic direct costs.

Brief summary for 2019 (approximate numbers):

- The cost of the consortium agreements is almost 310M NOK². Covering traditional read-only subscriptions, transformative agreements (publish&read)

²100 NOK \approx 9 EUR

and OA-agreements. I.e., read access and publication costs.

- 115M NOK was spent on subscriptions and agreements outside the consortium. Typically, small bundles or single journal subscriptions.
- The institutions spent another 25M NOK on publishing in fully OA journals.
- It is also estimated that an additional 30(+)M NOK was spent on Hybrid OA publishing.
- In total, Norwegian institutions spent over 480M NOK on journal subscriptions and open publishing in 2019.

Except for the consortium agreements, most of the numbers are to be regarded as approximations. Some are relatively accurate, while others are estimates and based on educated guesswork.

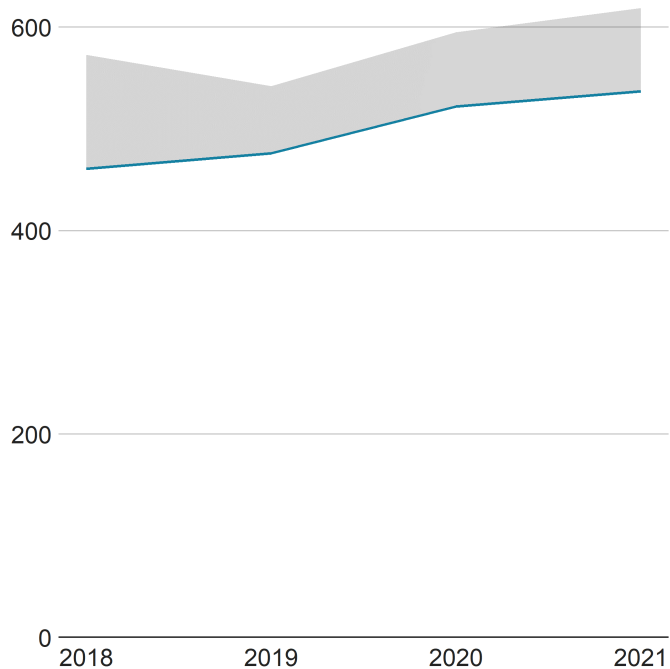
The most challenging part of such a cost mapping endeavour is determining the number of open publications, outside consortium agreements, to attribute to an institution and estimate the subsequent APC costs. As part of the Sikt agreements, publishers provide relevant metadata on authors and affiliations for all articles published through the agreement. These publication reports make it possible to connect each article to a single institution. A so-called paying institution. When estimating the cost of publishing Open Access outside such an agreement, one is generally confined to relying on data about corresponding author affiliations. This presents several issues and challenges. One of the most problematic is the case of multiple corresponding authors and/or multiple affiliations. This is an issue of determining which author and which institution is most likely to handle the potential payment of an APC invoice.

A widely adopted approach is using the first corresponding author, as listed on the publication. However, this still leaves plenty of room for speculation. As shown by the plot in [Figure 5.1](#) where the solid blue line represents the actual number of articles attributed to a Sikt consortium member institution, and the grey area above it represents the potential number of articles where at least one member institution was listed as an affiliation of the first corresponding author.

Over the last 5–10 years most of the universities and larger university colleges in Norway have had dedicated APC funds, where researchers can apply for APC funding when publishing Open Access (mainly gold journals). The Research Council of Norway also had a program called STIM-OA [93], where they reimburse institutional APC funds up to 50% of the cost (some restrictions apply).

Publisher X - First Corresponding

Publication Report vs Potential Articles



Source: /LÅT/Raymond

Figure 5.1: Blue line representing the number of articles where a member institution of the Sikt consortium was credited with the financial responsibility for the article publication, as per the publisher's publication report. The grey area above the blue line represents the number of articles where member institutions of the Sikt consortium was listed as affiliations of the first corresponding author.

STIM-OA provides an additional source of accurate cost data for at least some of the articles published OA by Norwegian institutions. However, the data collected by the STIM-OA program can be limited, the collection process has been very manual, which often makes the data somewhat inaccessible and cumbersome to reuse.

5.3 Assessing License Agreements

Another side of the cost of publishing coin is assessing and evaluating license agreements. At Sikt this has become an increasingly important and central part of the negotiation process. The main tool for performing such an evaluation is an inhouse developed Interaction Analysis (IA-analysis). As the name implies, it is based on different types of interactions a specific institution has with a certain journal. This institution-journal level analysis is done for every possible combination of member-institutions and journals within an agreement. The interactions currently include downloads, references (out-going citations) and published articles. Development work is already under way to include other relevant interactions in order to balance the analysis in terms of different institution profiles, e. g., curriculum lists, etc.

The underlying idea is to estimate the value of an agreement by calculating the cost of an institutions basic need for read access and the cost of publishing OA without a consortium agreement.

An example of an IA-analysis summary can be seen in [Figure 5.2](#) and [Table 5.1](#). It includes the current agreement cost in the first column (grey), the middle column is the cost estimated by the interaction analysis. This column consists of an estimated read cost or read value at the bottom (dark colour), and the estimated cost of publishing OA at the top (lighter coloured segment).

The analysis displays the publishing estimate based on individual journals list-price APC and the number of articles published by the institution. However, OpenAPC and other sources indicate that the list-price APC for a specific journal can differ substantially [94]. Potential explanations for such a variation can be society membership or other discounts, different prices based on article type or length, etc. This issue of obtaining or estimating accurate and realistic APC data in a specific case, again relates back to the aforementioned challenges of determining the cost of publishing open outside an agreement.

In cases where a publication agreement is already in place, the analysis is based on data from publication reports from publishers. Otherwise, this is naturally not an option.

Publisher A Consortium

Current agreement cost vs unbundled read & publish cost (€)

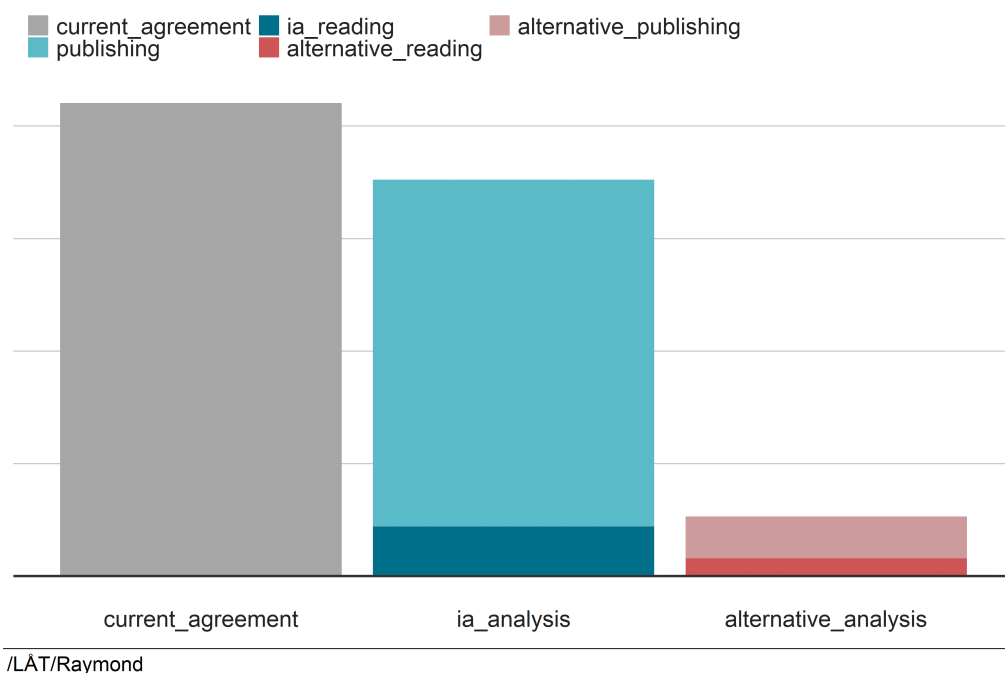


Figure 5.2: An overview of an Interaction Analysis, comparing current agreement cost with the estimated costs of basic read access and publishing open in the journals without a consortium agreement in place.

An additional, but equally important, element is being able to double check and verify the data and numbers in the publisher's reports.

With a national CRIS, in connection with the result-based funding scheme, Norway is in a unique position in terms of having control over research output, articles and affiliations of Norwegian authors. By enriching the CRIS data with corresponding authors, we have been able to predict the output volume of the consortium within an agreement with comparatively higher accuracy. Even so, there is still plenty of room for improvement.

publisher	A
participant	consortium
journals_total	1 348
relevant_journals	260
articles_pub_reports	714
articles_1st_corr	892
journals_no_interaction	226
journals_with_downloads	1 122
journals_with_pub_rep	257
journals_with_1st_corr_pub	268
journals_referenced	981

Table 5.1: A summary of key indicators from an Interaction Analysis, for evaluating a publish & read agreement.

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