Transformation from subscription model toward OA publishing model
~JUSTICE OA2020 Roadmap~

The JUSTICE OA2020 Roadmap, first announced in March 2019, was revised as follows in view of changes in the activities of JUSTICE and the circumstances surrounding it.

1. Background
JUSTICE has the mission of enhancing the nation's academic information infrastructure by contracting, managing, providing, and preserving e-resources. Under this mission, JUSTICE has undertaken negotiations with publishers, mainly focusing on big deal subscription models. As a result, our member libraries succeeded in restraining their expenses, increasing the number of available e-resources, and closing the gap in academic information environment between members. However, subscription costs have been increasing because of continuous price increase and the quantitative growth of academic journals. Therefore, it has become ever more difficult to keep subscription contracts not only in Japanese universities or research institutions but also in other countries around the world.

One of the fundamental solutions against this challenging situation is to transform the subscription model into the OA publishing model\(^1\). OA2020\(^2\) is one of the leading global initiatives to accelerate such transformation. Several European countries, which support the initiative, aim to transform subscription journals of big publishers to OA with the OA publishing model, and they are working to conclude a transformative agreement with political or financial support\(^3\) by countries or funders.

2. Purpose of our roadmap
JUSTICE has seen that there is no other way to overcome the situation except to consider new models, and has been gathering information about worldwide trends. As part of information gathering, we endorsed the OA2020 Expression of Interest in 2016, and we have analyzed Japanese financial and publication data to confirm the feasibility of transformation. Creating the JUSTICE OA2020 Roadmap is following this work. Our goal is to clarify the way to go through the transition period until a fully OA publishing model can be realized. Academic institutions, including Japanese ones, have already paid APCs\(^4\) in addition to subscription fees as the cost of scholarly communication, and total amount of these costs have been increasing. If we leave the cost increases unchecked, we will not be able to keep the subscription model (cannot read) or pay for APCs (cannot publish). We need to shift our axis from read to publish to avoid this future, and at the same time, we have to find a model which is able to manage the total cost of publication (subscription fees plus APCs).

3. Creating roadmap and the future
There are some concerns\(^5\) about the OA publishing model, for example, concentration of APC revenue or APC price increase could decrease competition and make the market more monopolistic. The amount of spending on publishers may not decrease easily, and institutions may need to change their budget allocation and workflow. However, OA published research output can be used by everybody for free. Regarding this point, scholarly communication would
be improved compared with the current subscription model. In addition, the OA publishing model will bring transparency and inject healthy competition by allowing comparison and choice. As a result, this flow of transformation should decrease publication costs and release the money which is tied into subscription fees to enhance the new scholarly information infrastructure.

Academic research and scholarly communication is expanding across borders and, therefore, it becomes more important to align with international trends to maintain the scholarly information infrastructure in Japan. To achieve our mission within the conversion of scholarly communication, we, JUSTICE hope that the Roadmap will enable member libraries to deepen their understanding, further negotiate with publishers, and take the opportunity to cooperate with stakeholders including other member universities.

Since releasing the Roadmap in March 2019, JUSTICE has been engaging in negotiations concerning OA publishing models with publishers based on its clear negotiation policy. Consequently, several publisher proposals have been agreed upon, with an increasing number of member libraries entering into contracts in recent years. In addition, researcher communities and government agencies in Japan have announced their recommendations and requests concerning OA publishing, and some universities and institutions have even concluded independent OA model agreements with publishers that have not made a proposal to JUSTICE. However, in European countries that have been spearheading the transformation to OA publishing models the number of OA papers (especially those published in “hybrid” journals) has been rising significantly faster than in Japan, driven by strategies implemented by their governments and funders. For Japan to share its research outcomes with the world beyond paywalls and increase its global competitiveness, OA is becoming even more imperative. In light of such circumstances, we have revised our OA2020 Roadmap as outlined in the next section.

4. JUSTICE OA2020 Roadmap

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- Data Analysis/evaluation

The data necessary for negotiation is accurate data on subscription fees, publication output, APC expenditure, etc. We will continue to constantly monitor publication output trends, costs, OA progress, etc. Moreover, in collaboration with member libraries that have entered into agreements on OA publishing models, we will investigate the changes in costs resulting from the
transformation to an OA model and evaluate the respective models. We will continue to collect, organize and analyze the relevant data, and share the information with member libraries.

Pilot and expansion toward OA publishing model
We will continue to undertake pilot programs to realize an OA publishing model agreement in an effort to expand the initiative. As part of our pilot programs, we will accept variable transformative agreements(6) which can achieve total cost management, as well as transformative OA proposals in parallel with a subscription model or proposals that target specific universities, and engage in negotiations for an OA publishing model agreement. When a consensus/agreement has been reached on an OA publishing model, we will request that the model be improved through negotiation in view of the results of analysis and evaluation, and gradually expand the refined model to other publishers. JUSTICE will support groups of universities in negotiating for their desired agreement, and use the experience and outcomes gained in its own activities. While closely monitoring the evaluation of each publisher’s OA model, the progress made in the transformation toward OA, and the circumstances in Japan and other countries, we will flexibly revise our negotiation policy.

Optimization of subscription fees and APCs, and grant
Optimizing subscription fees and APCs is a pressing issue that needs to be addressed in Japan. To accelerate the transformation toward an OA publishing model, each university needs to change their way of budget allocation and flip from subscription spending to OA support expenses. Additionally, universities that have a high publication output may need additional budget, because the money they currently spend on subscriptions may not be enough for the conversion(7). In overseas cases, funding agencies support these universities. In order to promote these actions, we will continue our advocacy activities targeting various stakeholders.

Consensus & Cooperation
If we regard boycotting journal subscriptions, peer review, and/or editing journals as our options when publishers do not accept negotiation for an OA publishing model, not only the libraries but also researchers’ support is necessary. We will work with the president and/or top management of universities, the Japan Association of National Universities, the Japan Association of Public Universities, the Japan Association of Private Universities and Colleges, as well as the Association of Private Universities of Japan(8).

Supplementary Actions
- Expand national license of back files to realize OA for articles published in the past.
- Take part in other types of OA model, such as library subsidy models, to promote OA of academic outputs which APC does not fit for publication(9).
- Develop an alternative scholarly publishing platform(10) that is academic community based.
Open Access is a mechanism by which research outputs are distributed online, available free of charge to everybody. Providers need to cover the publishing cost in some way to give free access to users. The OA publishing model is a model in which costs are based on “publishing” research outputs rather than based on “reading”.

A global initiative coordinated by the Max Planck Digital Library on behalf of the Max Planck Society. See also their FAQ. https://oa2020.org/learn_more/#frequently

cOAlition S is a consortium providing political/financial support. cOAlition S has a target that “With effect from 2021, all scholarly publications on the results from research funded by public or private grants provided by national, regional and international research councils and funding bodies, must be published in Open Access Journals, on Open Access Platforms, or made immediately available through Open Access Repositories without embargo.” and 10 principles, called Plan S. They are calling funding agencies around the world to join.

Article Processing Charge is a fee for publishing research output. Generally, researchers pay APCs when they publish their articles in OA, which is called the “Author pays” model.

See OA2020 FAQ for concerns about monopolization or APC price increase. https://oa2020.org/learn_more/#frequently

During the transformative period from subscription to OA publishing, various hybrid models including both elements (subscription and OA) can be expected, for example, Read & Publish model, APC discount, or voucher based on subscription spending.

Based on study by JUSTICE, some Japanese universities may need a grant to cover APC costs because they are higher than their subscription expenses. OA2020 considers these cases as well. See more details in their FAQ. https://oa2020.org/learn_more/#frequently

In Germany, there is nationwide licensing project called Project DEAL, and the German Rector’s Conference plays a large role within the project.

SCOAP³ and Diamond OA (OA models that require neither subscription fees nor APCs; mostly funded by third parties) are examples of non-APC based OA publishing models. For questions about disciplines that the author pays model may not fit, see FAQ. https://oa2020.org/learn_more/#frequently

Institutional Repositories and the J-STAGE, platform for journal publishing carried by the Japan Science and Technology Agency, are examples of alternative scholarly publishing platforms.