openASSA Project

# **Working Party 3 – Legal**

# Discussion Document: Intellectual Property

## Introduction

The openASSA project, being an opensource actuarial software initiative, expects the most active contributors to be ASSA members currently working in the South African life insurance industry.

This discussion document seeks to identify the key intellectual property risks for openASSA, as well as their possible solutions.

Care has been taken, as far as possible, to avoid overlap with the Contributor Agreements Discussion Document.

## Intellectual Property Stakeholders

This Section identifies the major IP stakeholders in the openASSA project and provides a brief description of each of them. In addition, each sub-section highlights the main items openASSA should contemplate when considering the stakeholder in question.

### openASSA

As the opensource initiative itself, openASSA is the primary stakeholder in this case. Volunteers will contribute IP to openASSA, where contributions will be combined and released as opensource libraries or repositories. For further details on the licensing of the opensource projects, please see the Licenses Discussion Document.

Ideally, openASSA would want to avoid any claims of IP infringements, and would want volunteers to contribute (in good faith) IP which is theirs to contribute. In addition, openASSA would want to avoid creating unreasonable barriers for volunteers to contribute to the project (such as onerous on-boarding processes or complicated legal documents).

### Volunteers

The openASSA volunteers will essentially be writing all of the code for the project and contributing the code to openASSA. As such, the volunteers are naturally the next group of stakeholders to consider.

If the contribution is an original work, and in the absence of an agreement which states otherwise, the IP belongs to the volunteer.

However, in most cases the volunteers are expected to be employees of life insurance industry participants. And for most of these volunteers, it is expected that their employment contracts will have wording to the effect that any IP produced during the ordinary course and scope of their employment belongs to the employer. In addition, some contracts might state that any work done on company equipment, even if it is outside the normal scope of employment, constitutes the employer’s IP.[[1]](#footnote-1)

Considering that this is very much an actuarial project, the line between this project and ‘the ordinary course and scope of employment’ is blurred. In addition, the line between doing something as a work project and doing something as a volunteer in your own time is also blurred. E.g. if the employer has a possible reputational or legal impact from an employee’s involvement in the project, then is the employee really volunteering in their own time? Or are they representing their company in a way?

In either one of the two cases above, openASSA would want volunteers to grant a copyright license[[2]](#footnote-2) to openASSA to use their contributions. Presumably, volunteers would also want to be able to contribute to the project without being caught up in red tape, and without taking on an unfair amount of legal liability. As such, any agreements between openASSA and its volunteers should be clear and well-communicated.

### Employers of Volunteers

As mentioned in Section 2.2 above, many of the openASSA volunteers will be employees of life insurance industry participants. And in some cases, the IP contributed by the employee could be considered to be the employer’s IP. Hence the employers of volunteers are key stakeholders to consider.

As with the volunteers, there may be a need for employers either to grant openASSA permission to use certain contributions, or to waive their potential ownership of contributions to the project. In particular, the employer may need to agree that:

* The employee has notified the employer of involvement in the project, and that the employer has granted permission (and is comfortable with the employee sharing some ideas).
* The IP contributed to the project does not belong to the employer.
* The employee is not getting paid for the work.
* The IP will vest in the project and that it is only for this project.

Employers, on the other hand, may wish to agree with their employees on the nature of their involvement in the project, and the scope of their contributions.

### ASSA

Since the openASSA project is being conducted under the auspices of ASSA, ASSA would be an important stakeholder. The main risks to ASSA would be any reputational risks associated with the project, and any relationship risks with its members and their employers.

ASSA might want to avoid the possibility of disputes further down the line by ensuring the correct agreements are in place at the start of the project.

### Existing Proprietary Software Providers

While openASSA is an opensource initiative, it is important to note that there are already proprietary actuarial modelling software solutions available in the market, and that their functionalities might overlap with the functionalities of an openASSA library. In this case, existing software providers might be interested to know whether the openASSA source code infringes on any of their IP.

However, it is expected that existing agreements between software providers and companies will usually clearly define what constitutes the software provider’s IP and the company’s IP.

### Other Third Parties

Any other third party which might claim that their IP rights have been infringed by openASSA, such as existing patent holders, should also be considered as a stakeholder.

For example, consider the case where a third party has patented a block of code and alleges that the openASSA project has infringed on this patent. The patent holder could demand that openASSA refrains from using the patented code or pays the patent holder a fee for use.

## IP Risks for openASSA

### Identification of Risks

The primary IP risks for openASSA, in the view of this working group, are as follows:

* The risk that a volunteer decides, at some point after contributing, to put in a claim on their contributions to the project.
* The risk that an employer puts an IP claim on its employee’s contributions to the project. Coupled with this risk, is the risk that employers are displeased with the employee and with ASSA for the infringement of their IP rights.
* The risk that a third-party proprietary software provider puts in an IP claim on some part of the project (such as a patented algorithm or visualisation).
* The risk that a third party puts in an IP claim.

### Impact should the risks materialise

Should any of these risks materialise, the potential impact is likely proportionate to the importance of the IP in question. For example, should a third-party patent holder demand that openASSA stops using a small block of code, openASSA could probably accept the demand and find a workaround without too much trouble. On the other hand, however, if one of the project’s most prolific contributors were to demand a fee for the continued use of their IP, it could cause a major disruption to the project and precipitate large delays.

An area which still requires clarification, is what the legal process might look like should any of these risks materialise. Further information is also needed on the possible legal and financial consequences for openASSA (including its contributors) and ASSA, should any of these risks materialise.

At present, the working group has identified the following possible consequences in the event an IP claim against openASSA is successful:

* The aggrieved party could demand that openASSA stops using the IP in question.
* The aggrieved party could, alternatively, demand that openASSA pays a fee for the continued use of the IP in question.
* The aggrieved party could make the same demands of the current users of affected openASSA libraries. For example, if a company is using an openASSA library in their valuations process, and the library contains the IP in question, the aggrieved party could make the same demands of the company.
* The aggrieved party could sue for damages.

## Suggested Risk Mitigations

In order to mitigate against the risks mentioned above, openASSA could make use of contributor license agreements (‘CLA’). The Contributor Agreements Discussion Document contains further details on this.

It is worth mentioning here, however, that the most direct way of avoiding IP disputes would be to have CLAs with volunteers, as well as with their employers. Of course, this is not always practical – not least due to the time-consuming process of having to engage with the legal departments of large corporates.

In addition, we might find that openASSA attracts contributions from volunteers in different countries. In these cases, it might be near impossible to put an agreement in place with the employers.

While openASSA could try to streamline the corporate CLA process by using a standard publicly-available template, perhaps the middle ground would be for openASSA to seek corporate CLAs on a risk-adjusted basis. That is, it is worth the effort of obtaining a CLA from a particular employer where its employees are expected to make a significant contribution to the project. This would also remove some of the legal liability from the shoulders of those volunteers making significant contributions.

## Working Group Recommendation

In the view of this working committee, openASSA should not have any appetite for IP risks arising from contributors, or from the employers of contributors. As such, it is recommended that openASSA puts CLAs in place for all contributors. In addition, corporate CLAs should be put in place with employers whose employees are making significant contributions to the project.

With regard to the risk of third-party proprietary software providers instituting an IP claim, openASSA can rely on clauses in the CLA which require volunteers to declare that their contributions are their original work. Hence, it is recommended that the CLAs contain such a declaration from volunteers, and that the legal liability of such claims is transferred to the contributors.

Furthermore, it is recommended that openASSA accepts the risk of other third parties (such as existing patent holders) instituting IP claims. This is because openASSA cannot reasonably possibly make itself aware of every existing patent which might overlap with the openASSA code. In addition, the openASSA libraries would simply be implementations of standard actuarial modelling techniques, or methodologies prescribed by legislation, accounting standards, or professional guidance. Hence the risk of these implementations infringing on an existing patent seems quite small.

Finally, this working group also recommends that we specifically ask ASSA’s lawyers for further information on how the legal process might look in the case that one of the IP risks materialises. In particular, it is important to clarify the potential legal and financial consequences for openASSA (including its contributors) and ASSA. ASSA’s lawyers should also be asked for a view on whether the proposed risk mitigations provide openASSA with sufficient indemnity against IP claims.

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**Legal process in the context of an IP risk materialising**

Where any third party wishes to institute infringement proceedings against ASSA (which will most likely be in the form of copyright or patent infringement proceedings) they typically commence such process by sending ASSA a letter of demand, setting out their claims and their demands. A party claiming infringement would be entitled to seek an interdict against ASSA (for example, to cease using the infringing code) as well as to claim damages or a reasonable royalty which would have been payable by an authorised licensee in the circumstances. Such letter would request ASSA to respond by a certain date, failing which the third party will threaten to institute legal proceedings.

Upon receipt of the letter of demand, ASSA will have an opportunity to respond. Should ASSA not respond by the deadline given, or if the response provided is unfavourable to the third party (or if the parties are unable to reach a settlement) such party may institute urgent legal proceedings in the High Court of South Africa.

The process from then will effectively be litigation, and costs should be expected on the scale of opposed High Court litigation.

It is often difficult to prove ownership of unregistered intellectual property rights in court, such as copyright, (and therefore to enforce such rights against third parties) in the absence of robust recordal and documentation practices, such as copyright registers. It is therefore recommended that ASSA keep a copyright register, if possible, documenting who the authors of the copyrighted works are, so that authorship and ownership can be proved if and when necessary.

**Proposed risk mitigations**

The proposed risk mitigation measures are in order. In particular, openASSA must ensure that appropriate wording is contained in the CLAs to provide openASSA with protections against potential risks.

OpenASSA should also consider implementing an internal policy for the procedure to be followed if notified of that ay software contributed potentially infringes any IP. It will be essential that ASSA keeps a record (copyright register) of every contributor and their contributions. Such a policy would cover, for example:

1. Notifications protocol - identifying who needs to be notified and how;
2. Standard notification language - a template notice which can be used to notify the relevant individuals of an IP infringement claim;
3. Protocols for removing software from the library - putting in place processes and procedures for determining when and how any software should be removed from the library; and
4. PR strategy: setting out the steps to be taken in the event that ASSA is required to release a media statement on an IP infringement claim.

1. This link contains a nice summary of some of the legal considerations for employees and employers contributing to opensource projects: <https://opensource.guide/legal/#what-does-my-companys-legal-team-need-to-know> [↑](#footnote-ref-1)
2. Common wording found in Contributor License agreements is as follows: “…perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare derivative works of, publicly perform, publicly display, sublicense, and distribute the contributions and such derivative works.” [↑](#footnote-ref-2)