Implementers Guide to the WISE Baseline Acceptable Use Policy

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Abstract

Applying the Baseline AUP to concrete use cases may appear straightforward, but there are many edge cases and specific circumstances where it is not entirely obvious how to both achieve the aim of user-friendliness as well as be complete and practical. In this write-up, we try to give hints how to use the WISE Baseline AUP in practice in both community-first as well as ‘user-first’ membership management services

Table of Contents

1. Aims of the Baseline AUP

Necessarily presented but often ill-read or glossed-over entirely by the user, acceptable use policy (AUP) and terms and conditions are necessary instrument in the regulation of infrastructure access. They bind the user to the 'purpose' for which services and resources have been provided. Yet, like with privacy notices, the reader is not in and of itself interested in the notice, but is rather inclined to click through and proceed with the actual task at hand. Thus, the number of times a user, or applicant, is presented with an interstitial notice must be kept to a minimum, preferably just a single time. Yet it should cover as much of the user's potential use of the infrastructure: the more services and resources deem an AUP as sufficient for their policy purposes, the better it will be. This will allow users to use resources from multiple service and resource providers without the need to confirm acceptance of additional AUPs.

The aim of the WISE Baseline AUP is to

- provide a common baseline set of criteria for acceptable use and terms and conditions for the professional use of IT infrastructures for research globally – and thereby ease the trust of users across infrastructures: services within an infrastructure have a common framework describing the behaviour of users coming from multiple communities;
- facilitate a presentation format that allows necessary privacy notices (in Europe for GDPR compliance) to be presented at the same time and remain easily available thereafter;
- support services with varying levels of support and quality guarantees;
- provide for augmentation of the baseline AUP with community and infrastructure-specific terms and conditions
- be applicable to both community-first and user-first AAI membership management services.

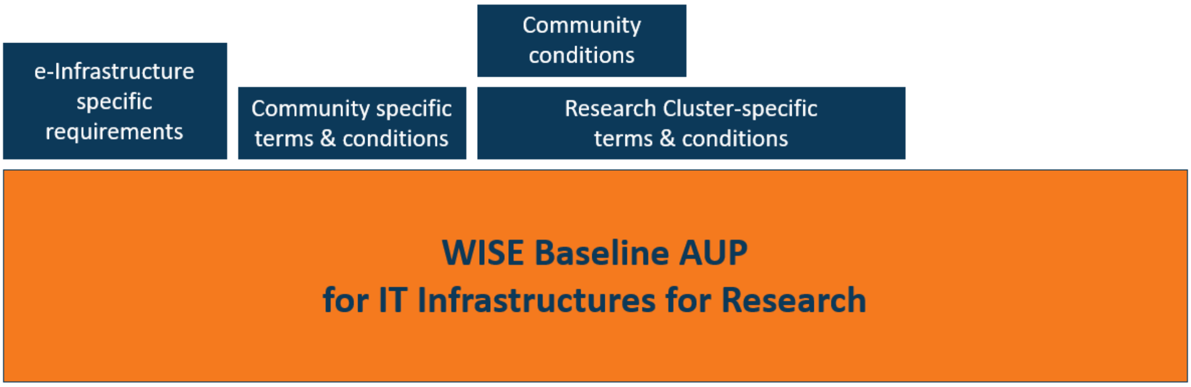
The AUP should preferably be presented once, and during the first interaction of the applicant (potential user) with the Infrastructure. As such, the *membership management service* (MMS) is the most appropriate component to present and manage AUP acceptance.

2. A scalable model with shared language

Typical AUPs vary considerably between organisations, service providers, and infrastructures, even though the AUP Alignment Study identified a few main 'strands' of textual history common to multiple infrastructures. Having textual variations complicates comparison of AUPs and makes infrastructures and service providers feel the need to (at least) also present 'their own' AUP on first access to the service. For a Baseline AUP it is therefore critical that the *basic AUP requirements* are both *common* as well as *immutable*. Specific service providers and infrastructures may *augment* the AUP with domain- or service-specific clauses, but should present the Baseline AUP 'as is' without modifications. Only in this was can a policy mapping exercise, repeated user interaction, and a multitude of interstitial pages be avoided.

The WISE AUP model uses a layered approach to AUP composition:

- the Baseline AUP is a set of ten 'commandments' that are identical and equally applicable to all services and infrastructures
- the body or bodies that are authoritative to grant access ("Granting Authority", for lack of a better word), as well as the purpose binding of the user's activities are *templated* explicitly in the preamble
- the AUP provides a place for optional additional agreements or terms and conditions, that *augment* (but not replace or contradict) the Baseline AUP commandments. For communities 'hosted within' one or more infrastructures, such additional agreements can be combined (stacked) and presented once, and together.


Community conditions
e-Infrastructure specific requirements
Community specific terms & conditions
Research Cluster-specific terms & conditions
WISE Baseline AUP
for IT Infrastructures for Research

A logical view of how the baseline AUP can be augmented with more-specific terms and conditions is shown in the viewgraph above. Examples of such augmented terms may include e.g. the requirement to recognise (cite, acknowledge) contributing infrastructures and service providers, or a condition that no attempts may be made to reverse pseudonymisation techniques that have been applied to protect sensitive data to which the user may gain access.

3. The WISE Baseline AUP

The WISE Baseline AUP[1] in its preamble and final clauses, it given below. The blue text elements should be substituted on-line, whereas the green elements are optional and need to be filled on only when needed, e.g. based on the guidance in this document.

Acceptable Use Policy and Conditions of Use

This Acceptable Use Policy and Conditions of Use ("AUP") defines the rules that govern your access to and use (including transmission, processing, and storage of data) of the resources and services ("Services") as granted by {community, and/or the agency, or infrastructure name} ("Granting Authority") for the purpose of {describe the stated goals and policies governing the intended use}.

[1] currently in a close to final state, the definitive version is maintained on-line

<This document may be augmented by additional agreements or terms and conditions, in which case the Granting Authority may optionally add specific clauses - or references thereto - here that are not in conflict with the clauses below and that further define and limit what constitutes acceptable use. The wording of the following clauses must not be changed.>

1. You shall only use the Services in a fashion consistent with policies of the Granting Authority and for the purposes described above.
2. You shall not use the Services for any purpose that is unlawful and you shall not breach, attempt to breach, nor circumvent any administrative or security controls.
3. You shall respect intellectual property and confidentiality agreements.
4. You shall protect your access credentials (e.g. passwords, private keys or multi-factor tokens); no intentional sharing is permitted.
5. You shall keep all your registered information correct and up to date.
6. You shall, as soon as reasonably possible, report any known or suspected security breach, credential compromise, or misuse to the security contact stated below; and report any compromised credentials to the relevant issuing authorities.
7. Reliance on the Services shall only be to the extent specified by any applicable service level agreements listed below. Use without such agreements is at your own risk.
8. The Granting Authority and/or the provider of the Services process your personal data in accordance with the privacy statements linked below.
9. The Granting Authority and/or the provider of the Services may, for administrative, operational, or security reasons, restrict or suspend your use without prior notice and without compensation, within their domain of authority, and you shall immediately comply with their instructions regarding your use of the Services.
10. If you violate these rules, you are liable for the consequences, which may include but are not limited to a report being made to your home organisation and, if the activities are thought to be illegal, to appropriate law enforcement agencies.

The administrative contact for this AUP is: {email address for the Granting Authority}
The security contact for this AUP is: {email address for the infrastructure, community, and/or Granting Authority security contact}
The privacy statements (e.g. Privacy Notices) are located at: {URL}
Applicable service level agreements are located at: {URLs}

4. The AUP and supplementary user notices

In addition to the AUP, other information also has to be presented to the user, including – for those subject to GDPR and like regulatory environments – “Privacy Notices” for the AAI as well as for any infrastructures, proxies, and services connected to it. The Baseline AUP itself also lists a few items that supplement acceptable use, such as (links to) service level agreements and any other rights and privileges the user may enjoy using the service.

Finally, in order for the user to be able to question the AUP, or to actually report security breaches as requested in item #6, both administrative as well as security contact information for the *Granting Authority* needs to be added. Of course, such contact can be shared by many communities, or can be provided as a service to communities by Infrastructures that operate an AAI on behalf of such a community.

5. Application to community-first membership management services

The way in which a community (or other body) that has its own 'AAI entry point' can use the Baseline AUP model is straightforward. The community, when establishing itself, will identify the (existing or new) name of their collaboration and define a one-sentence *purpose* for which services will be used (typically, the aim or mission statement of the collaboration, community, or organisation). Any ancillary clauses that augment the Baseline AUP are also identified, alongside the responsible administrative and security contacts, URL for the privacy notice, and any agreements that the community has in place with Service providers or infrastructures.

For presenting the AUP, it does not matter whether the community operates the membership management service (MMS) by itself, or whether it has outsourced such operations to a third party (a dedicated service provider, an infrastructure, or infrastructure consortium). The community remains the single 'logical' entry point into the AAI ecosystem and any services 'below' the community AAI will be accessed either via the community proxy, or using community user identifiers, or by means of and on behalf of the community. Since users access services based on their community membership, they will all have seen and accepted the AUP when presented by the Community MMS.

It is up to the community management to ease the user's workflow by collating the necessary documents: the list of Privacy Notices (for the MMS itself, but also for the connected services. If a community connects a new service or e-Infrastructure to its AAI, it shall record and post the Privacy Notice of such Service or infrastructure on the Community Privacy Notice page.

Similarly, if the community has agreed specific service levels with one or more service providers, it should maintain a list of such additional agreements so that their users will be able to be informed of - and thus better enjoy - the service the community has negotiated for them.

5.1. Implementation suggestions

Some of the 'information' pages that the community AAI (or its MMS) has to maintain can be automatically generated. For example, each independent service provider already has to declare and publish its own privacy notice. Service meta-data often contains a reference to such a privacy notice, and based on the meta-data of the list of connected services the Privacy Notice overview page can be automatically populated. Users may (when deemed so necessary) even be automatically informed of changes to this page for services the user has previously used.

5.2. Example

3He SRC Collaboration Acceptable Use Policy

This Acceptable Use Policy and Conditions of Use (“AUP”) defines the rules that govern your access to and use (including transmission, processing, and storage of data) of the resources and services (“Services”) as granted by **the EMIN group** ("Granting Authority") for the purpose of **studying short-range nucleon-nucleon correlations by means of electron-induced two-proton knockout from Helium-3**.

… *follows Baseline AUP standard ten clauses* …

The administrative contact for this AUP is: **he3epp@nikhef.nl**
The security contact for this AUP is: **security@nikhef.nl**
The privacy statements (e.g. Privacy Notices) are located at: **https://www.nikhef.nl/privacy**
Applicable service level agreements are: **absent - no specific service level has been agreed with our Service providers.**

6. Application to user-first membership management services

Multi-tenant MMSs – services that support more than one community, agency, or infrastructure – may be designed such that the applicant first becomes a user of the MMS itself, and within that context can joint one or more communities (virtual or collaborative organisations). This is especially prevalent if the MMS is designed to support a large number of small, lightweight, and ad-hoc collaborations. For the purpose of this document, we will refer to such MMSs as ‘user-first’ (since the MMS enrolment flow is centred on the user, not the community).

This leads to potential confusion in drafting the AUP that is presented by the MMS to the user on initial enrolment. At enrolment time, the only thing known to the MMS is the intent of the user to join the MMS. It cannot at that point infer subsequent enrolment in a community or VO, and thus cannot present the name of the “Granting Authority”, nor the purpose statement for the community (or communities!) the user may ultimately join.

Since the purpose binding cannot be presented during the enrolment step, it is indeed unavoidable to show the user the purpose for which Services available to the community (VO) may be used. This however does not present a significant user interface barrier, since the user anyway has to be presented with an *enrolment flow* (petition, confirmation) page once the user expresses the intent to join such a community.

Similarly, the ad-hoc creation of communities on a multi-tenant MMS does not pose issues per se, and in fact the creation of a new community provides (by definition by a user who will by virtue of its creation become the community manager) the most appropriate interaction point in which to collect the necessary information for a community to be presented in the AUP.

The premise remains that *the Baseline AUP commandment are immutable*. What needs careful phrasing are the definition of the Granting Authority, the purpose, and the augmented terms and conditions.

The term *Services* should be construed in its broadest meaning, and which *Services* are part of the suite to which the user has access will vary over time. During enrolment, there may be just a single service (the MMS), under authority of its own operator. When joining a community or VO on the platform, the MMS will *in addition* be a Service also of the community, and the community (druing its creation) will have (implicitly) linked the MMS as one of its services. This dual ‘role’ of the MMS thereby resolves the apparent conflict of priority between the hosting infrastructure (during initial enrolment) and the community (once a user has joined such).

6.1. Enrolment in the MMS

During the MMS enrolment phase, the body granting an applicant user access to the MMS (“Granting Authority”) is still the operator of the multi-tenant MMS, e.g. the generic e-Infrastructure or service provider running the service itself. The purpose for which an applicant registered with and starts using the MMS is also clear. It’s *for the purpose of participating in activities of research and educational collaborations (“Collaborations"), which are represented in the Service as "Virtual Organizations"*.

> **Example AUP for an MMS operated by OneRing GmbH**
>
> This Acceptable Use Policy and Conditions of Use (“AUP”) defines the rules that govern your access to and use (including transmission, processing, and storage of data) of the resources and services (“Services”) as granted by **OneRing** ("Granting Authority") for the purpose of **participating in activities of research and educational collaborations (“Collaborations"), which are represented in the Service as "Virtual Organizations"**.
>
> *… Augmented Terms and Conditions and Baseline AUP Commandments follow …*

At this time, the *Privacy Notice* will refer to only that of the MMS operator, and the same follows for the administrative and security contacts, as well as any service level description if there is one.

However, in its simple and plain form above it will not be clear for the user that the *Baseline commandments* will also in the future apply to any Services (sources, infrastructures) to which the user may gain access by virtue of being a member of a Virtual Organisation. This is the place where the multi-tenant MMS service may be of significant help to the communities hosted within it: making such transitive applicability explicit through augmented terms and conditions shown already at this time during enrolment.

Example of augmented terms and conditions for a multi-tenant MMS service

“The MMS Service may be used to facilitate access to Connected Services provided by other organizations and/or OneRing GmbH.

Access granted by the Service Provider to the MMS Service does not imply that access to Connected Services is granted.

Access to Connected Services available to a Virtual Organization are granted to members of that Virtual Organization by the owner(s) of the Virtual Organization ("Granting Authority"). Users of the Service can be members of more than one Virtual Organizations hosted on the Service.

The Baseline clauses of this AUP apply equally to both the MMS service as well as to all Connected Services, as augmented by any specific terms to which adherence will be required during enrolment in any Virtual Organisation.”

Having shown this ‘decorated’ AUP for the MMS on enrolment, any Services that either the operator of the MMS or the VOs will connect to the platform can rely on the fact that the Baseline AUP commandments have all been shown to the user. If these requirements are sufficient for service use, there is no need to present these again to the user on joining a community and require their confirmation of acceptance. However: the *purpose binding* of the AUP for the community has not yet been taken care of. We must ascertain that users will be permitted to use the Services to which the community (VO) gives them access are used in a way compatible with the purpose for the VO has granted access.

This purpose binding should be done *when the user petitions access to a VO*. It can be in the form of a (either pre-checked or explicit) tick box on the (electronic) VO enrolment form, which has to be shown to the user anyway (even if it is just a simple confirmation dialogue box). All relevant information (name of the VO, VO manager, *purpose* of the VO) is available in the MMS platform and it can be used to construct the confirmation dialogue box.

Example VO Sign-up Form

Name:	Pietje Puk
Email:	nobody@example.org
Affiliation:	Affiliate
[X]	I shall use the resources and services of ***VO_NAME*** for the purpose of ***VO_DESCRIPTION***

[DECLINE] [CONFIRM]

Some of the information that has to be presented to users that petition access to a VO must be provided by the (hosted) VO. This is information that is customarily already collected:

- VO name (should become the “Granting Authority” unless stated otherwise)
- VO description (should become the purpose of the VO unless stated otherwise)

Thus collecting the VO Name and the VO Description needs to be done during the VO creation process, and community creation templates should be built to allow collection of this information (although this is likely already done).

Specific care has to be taken for *auto approval* workflows. Since in such cases no interstitial confirmation screen is presented, it is impossible to inform the applicant of the purpose-binding of the VO. Therefore, auto-approval flows should be limited to those VOs that only connect Services owned and operated by or on behalf of the MMS operator itself.

For *invitation-based* enrolment, the requisite purpose binding can be shown on the enrolment confirmation page.

6.2. Supporting hosted VOs with the services they connect via the MMS

Several MMS platforms allow a community (VO) to *attach* services to a VO. The set of *connected services* may vary between VOs and will usually include services that are offered by third parties, i.e., other providers than that of the MMS service. Services may be connected to one or several VOs on the same platform, and will be accessible to users only by virtue of their VO membership.

Such connected services will each come with their own (“GDPR”) Privacy Notice, and *may* come with additional terms and conditions that augment the Baseline AUP. The MMS platform can provide significant help to the VOs they host by automating and specializing the Privacy Notices and AUPs on a per-user basis.

The MMS platform should

- collect a link to the privacy notice for each service they connect to the platform. Privacy notices may be shared, but each service should have one
- allow services to provide and manage service specific terms and conditions
- allow services to provide and manage (a link to) default service level descriptions
- collect from each service an administrative and security contact

Since the MMS has knowledge about the VOs of which a user is a member, and of the services available to each VO, it can automatically construct (per-user) pages that implement the links listed at the bottom of the Baseline AUP. This greatly facilitates its presentation, provides ease of use for the users of the MMS, and implements the requirement to be able to consult the (combined) Privacy Notices for the user at any time.

> Example AUP **https://mms.onering.nu/my/aup?uid=5efefe18-c07a-461c-b718-17ccf349aef1**
>
> This Acceptable Use Policy and Conditions of Use (“AUP”) defines …
> *… Baseline AUP commandments follow …*

The administrative contact for this AUP is:
guru@onering.nu (MMS); voadm-alias@he3epp.org (VO: the EMIN group)
The security contact for this AUP is:
wraith@onering.nu (MMS); security@nikhef.nl (VO: the EMIN group)
The privacy statements are located at:
https://mms.onering.nu/my/privacy?uid=5efefe18-c07a-461c-b718-17ccf349aef1
Applicable service level agreements are located at:
https://mms.onering.nu/my/slds?uid=5efefe18-c07a-461c-b718-17ccf349aef1

And the Privacy statement URL could lead to a page looking like this:

Privacy Statement for ***User Name***

You are a user of the membership management service of OneRing GmbH and have also joined 1 virtual organisation on this platform, whose service providers are independent controllers.

OneRing GmbH will process your personal data in accordance with its own privacy policy provided at https://onering.nu/privacy

For the VO "**the EMIN group**", its service providers process personal data according to their policies listed:

- Service Provider **Vrije Universiteit Amsterdam** at **https://www.vu.nl/nl/privacy-statement.aspx**
- Service Provider **Nikhef** at **https://www.nikhef.nl/privacy**
- Service Provider **ISS** at **http://home.infn.it/it/?id=268&Itemid=427**
- Service Provider **University of Glasgow** at **https://www.gla.ac.uk/legal/privacy/**
- …

As VO membership on the platform changes, and as VOs connect and disconnect Services on the platform, the Privacy Notices, contact addresses (and any service level descriptions) will then adjust automatically.

6.3. Supplementary terms and conditions for hosted VOs

A mechanism similar to the Privacy Notice generation can also be applied for VOs that have their own supplementary terms and conditions, as well as any augmented AUP terms that are the result of a VO connecting *services* that themselves have such additional statements.

Where possible, it should be the VO that presents *all supplementary terms and conditions* on behalf of *all its connected services*. This ensures that they are worded in a way that the user understands, and that makes sense in the context of the VO. Agreeing such terms and conditions should be done by the VO manager when connecting services.

VOs with supplementary terms should register these terms in the MMS (alongside the VO description), and the MMS must present these terms during the enrolment flow – extending the purpose binding discussed previously. User confirmation in these cases should most likely be an explicit, positive action (active checking of the box).

Example Sensitive VO Sign-up Form

Name: Pietje Puk
Email: nobody@example.org
Affiliation: Affiliate

[X] I shall use the resources and services of ***VO_NAME*** for the purpose of ***VO_DESCRIPTION***

[ ] I agree to the following additional terms and conditions for the use of services to which VO_NAME may grant access:

* *You shall provide appropriate acknowledgement of support for your use of the resources/services provided by adding “This work has been supported by VO_NAME, which is co-funded by The Agency”*

* *You will avoid any attempts to reverse privacy enhancing technologies (i.e., pseudonymization, anonymization) applied to the data and/or to (re-)identify individual natural persons (such as patients or donors who have consented to and contributed her/his data or biological material to be used in research) contributing the data and/or donating the biological material.*

[DECLINE] [CONFIRM]

Only in exceptional cases should the MMS operator collect supplementary terms from the service, and present these to the user in a concatenated manner on the enrolment page. It is the responsibility of the VO manager to draft a coherent set of terms and conditions that govern its own connected services.

References

WISE	https://www.wise-community.org/