

OSMF Licence Working Group

White Paper on the Introduction of the General Data Protection Regulation

DRAFT May 2018

Introduction

On May 25th 2018 the new EU-wide data protection regulation, the General Data Protection Regulation, short GDPR, will enter in to force. Contrary to the previous data protection directive, the GDPR does not require national legislation and is directly binding. Lots of aspects of the GDPR are not new and have been present in national laws in one form or the other, however this is the first time there will be largely identical data protection regulation throughout the EU and other territories that will need to have comparable regulation (CH, UK etc).

The LWG has been tasked with investigating the impact of the GPDR on the OSMF and the wider OpenStreetMap project and proposing any necessary changes. This however has not taken part in a vacuum, we have received professional counsel on a number of the aspects and data protection in OSM has been a hotly debated subject in the context of the national data protection regulation.

Naturally estimating the impact of the GDPR introduction and consequences before it is actually in force are fraught with the problem that we have to guess how the legislation will be applied in practice and there is a danger of both over- and underreacting.

This document does not aspire to cover every possible aspect of the GDPR, but just the most relevant points with the largest impact on OpenStreetMap.

Notes:

- The handling of OSMF membership data is naturally subject to the GDPR too, however as this is unlikely to have any major operational impact it is not a topic that we will discuss in this paper.
- This is not an implementation plan, while we will recommend certain changes and actions, we expect the OSMF board to actually decide on following and implementing them. The LWG will naturally work on the items that are within its scope.

Is the OSMF and OpenStreetMap subject to the GDPR?

Article 3 (<https://gdpr-info.eu/art-3-gdpr/>) states that the GDPR applies to the processing of personal data by a “controller or a processor” in the EU and to the processing of personal

data of data subjects “who are in the Union” that are offered goods or services “irrespective of whether a payment of the data subject is required.”

Assuming that we do process personal data in one form or the other, the conclusion can only be that the OSMF is subject to the GDPR.

At this point in time, prior to any court decisions, we must further assume that the exceptions listed in article 2 (2) (<https://gdpr-info.eu/art-2-gdpr/>) do not apply to typical services provided by community members (for example <http://hdyc.neis-one.org/>)

Does the OSMF process ‘personal data’?

In article 4 (<https://gdpr-info.eu/art-4-gdpr/>) the GDPR defines personal data as:

‘personal data’ means any information relating to an identified or identifiable natural person (‘data subject’); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person;

The OSMF collects and distributes a vast amount of data, see Appendix A for an overview. It is clear that the email addresses stored for each account are personal data, but does that apply to our geodata too?

While our geodata in itself should simply reflect what is on the ground, the metadata associated with the contributions, for example the time stamps, change set tags (for example locale, device and editor application information), can be associated with an “*identifiable natural person*” via at least the user id and the display name. For example it is possible to generate contribution profiles (when in the day somebody contributed to OSM) from the information.

Further it is clearly possible, with the metadata itself, to develop a fingerprint that would allow one to associate individual contributions with a specific person for many of our contributors even if user id and display name are not the person’s real name. For example, a user might use the same display name on OSM as on social media, and the social media account might identify the user’s real name, allowing a searcher to link the mapper’s real identity to their contributions.

An additional point to consider is that in low contributor density areas just the geographic location of the contributions may be enough to associate them with one individual and historically it has been shown (during the licence change) that the first edit of a contributor is very often an indication of their place of residence.

The GDPR does not require that we can do any of the above directly or a complete association of all contributions to their creators, as a result we believe it is clear that our geodata as currently distributed can be considered to contain personal data.

Do we process the personal data? The GDPR defines (<https://gdpr-info.eu/art-4-gdpr/>)

‘processing’ means any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction;

It is clear that we do multiple of the above and therefore clearly are processing personal data.

Does the OSMF process personal data “lawfully”?

In article 5 (<https://gdpr-info.eu/art-5-gdpr/>) the GDPR defines the principles for processing personal data, (1) a) states in respect to personal data that it should be

processed lawfully, fairly and in a transparent manner in relation to the data subject (‘lawfulness, fairness and transparency’);

And in article 6 (<https://gdpr-info.eu/art-6-gdpr/>) goes on to define “Lawfulness of processing”, relevant clauses for OSM are

(1) a) *the data subject has given consent to the processing of his or her personal data for one or more specific purposes;*

(1) b) *processing is necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject prior to entering into a contract;*

(1) c) *adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed (‘data minimisation’);*

and

(1) f) *processing is necessary for purposes of legitimate interests pursued by the controller or a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.*

To process personal data lawfully we need to decide on what legal basis we are undertaking it, and inform the data subjects accordingly as required by Art 12, 13 and 14 (<https://gdpr-info.eu/art-12-gdpr/> ff).

Does the OSMF have “consent” to process personal data?

In article 4 (<https://gdpr-info.eu/art-4-gdpr/>) the GDPR defines consent as:

‘consent’ of the data subject means any freely given, specific, informed and unambiguous indication of the data subject’s wishes by which he or she, by a statement or by a clear

affirmative action, signifies agreement to the processing of personal data relating to him or her;

The contractual arrangements between OpenStreetMap contributors and the OSMF are the “Contributor Terms” (https://wiki.osmfoundation.org/wiki/Licence/Contributor_Terms). The terms defines in the first paragraph its scope as

...contributing data and/or any other content (collectively, “Contents”) to the geo-database of the OpenStreetMap project (the “Project”). This contributor agreement (the “Agreement”) is made between you (“You”) and The OpenStreetMap Foundation (“OSMF”) and clarifies the intellectual property rights in any Contents that You choose to submit to the Project in this user account.

It specifically limits its applicability to contributions to the geo-database and its scope to intellectual property rights.

In article 2 “Rights Granted” it further says

You hereby grant to OSMF a worldwide, royalty-free, non-exclusive, perpetual, irrevocable licence to do any act that is restricted by copyright, database right or any related right over anything within the Contents, whether in the original medium or any other.

Again clarifying that it only concerns itself with intellectual property rights.

During the sign up process (a new user creating an account on openstreetmap.org) we display a link to the OSMF privacy policy (see [the privacy policy](#) and Appendix A) , the new user is however not required to explicitly indicate agreement to any of the sections nor to the terms overall. The policy currently does not elaborate on our data distribution via the database dumps and only mentions what is available via the website, it further does not make clear that most information on the website and API is available to the general public, not just only to logged in users. We cannot derive consent and from that lawfulness of the processing from agreement to the terms of the privacy policy as it stands.

Is it necessary to process personal data to fulfill the obligations from the Contributor Terms?

Certain types of processing personal data could be required, but not all of the types of processing that OSMF currently engages in. For example, the Contributor Terms state that the OSMF will, if it distributes the data, only do so on specific (open) terms and a procedure that must be followed to change those terms. Thus, distribution of any personal data that might be in geodata (e.g., an account’s first edit is often near their home address), but not metadata (when the edit was made, with which editor and similar) would be necessary.

Now, even if not explicitly stated, we believe that it is fair to assume that it is implicit in signing up for an OSM account and agreeing to the Contributing Terms that an account is created and the means are provided to actually contribute to the project, and that consent is

given to store display name and e-mail address that are provided during that process. However, nothing explicitly states that personal data in metadata is distributed with our geo-data, and a person who does not fully investigate OSMF's APIs and data dumps would not necessarily understand this.

In summary we currently lack both the explicit consent and contractual obligations to process the personal data lawfully in all of the current ways we do so. The Contributor Terms and Privacy Policy could be updated to explicitly describe and require affirmative consent to all data processing.

Data minimisation

The requirements in (1) c) further requires for lawfulness that the processing is *“limited to what is necessary in relation to the purposes for which they are processed”* (data minimization principle). Distribution of metadata is clearly not necessary for the purpose of creating and distributing free geo-data and it is fair to assume that the overwhelming majority of consumers of OSM data simply discard any such information during processing.

Does the OSMF have other lawful grounds for processing personal data?

Processing geodata that contains personal data might be considered necessary for the creation and maintenance of a public world map. Further, metadata such as userids, changesets, and timestamps are necessary to detect, prevent, and undo vandalism or other damaging or disruptive edits. Even emails, stored privately, are necessary in order to contact mappers about any issues in support of this overall goal. User names and diaries, which are provided voluntarily, also aid in communications on these issues.

The recitals appear to support such an interpretation (<https://gdpr-info.eu/recitals/no-47/>). For example, *“The processing of personal data strictly necessary for the purposes of preventing fraud also constitutes a legitimate interest of the data controller concerned.”* (Even directed marketing is considered a legitimate interest.)

The recital does caution that: “At any rate the existence of a legitimate interest would need careful assessment including whether a data subject can reasonably expect at the time and in the context of the collection of the personal data that processing for that purpose may take place.” It should be expected that contributions containing personal data would be processed, as well as user names, diary entries, and emails would be processed, even absent an explicit consent form addressing GDPR rights from IP rights.

Further, Recital 50 (<https://gdpr-info.eu/recitals/no-50/>) states that *“processing of personal data for purposes other than those for which the personal data were initially collected should be allowed only where the processing is compatible with the purposes for which the personal data were initially collected.”* Specifically, “[f]urther processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes should be considered to be compatible lawful processing operations.”

These additional lawful processing grounds appear available as OSMF is very unlikely to process any “sensitive personal data” (defined as “personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person’s sex life or sexual orientation”).

This could likely support our internal data retention and potentially the forwarding to community services for vandalism detection, for example OSMCha.

Does the OSMF operate ‘information society services’?

In conjunction with article 8 (<https://gdpr-info.eu/art-8-gdpr/>) we need to determine if the OSMF operates ‘information society services’. The term is not defined in the GDPR but is in other EU regulation, however not in one document, from the summary here <https://www.mpo.cz/en/e-communications-and-postal-services/postal-services/information-society-services/the-term-information-society-service--102673/>

we can follow yes that we provide ‘information society services’ and that the requirements in article 8 apply on top of the general lawfulness requirements.

Do the restrictions on services to children apply to OSM?

Article 8 (<https://gdpr-info.eu/art-8-gdpr/>) adds additional restrictions to when explicit consent can be given for lawful processing of personal data. In particular it requires that the data subject must be over a minimum age (16 in the GDPR but can be lowered to 13 by member states) or *that consent is given or authorised by the holder of parental responsibility over the child.*

As the OSMF clearly operates ‘information society services’ and article 8 does not have any exceptions based on the nature or kind of such services, it is obvious that the additional restrictions in article 8 would apply to the OSMF if we base the lawfulness of processing personal data on consent. It has been suggested to us that in such a scenario we would need to remove data (that is delete the account and associated metadata) from under 16 year olds if we in one way or another gain knowledge of the fact..

How does the ‘Right to erasure (right to be forgotten)’ apply?

The GDPR defines multiple rights of the data subject, the most well known is the ‘right to be forgotten’, laid out in article (<https://gdpr-info.eu/art-17-gdpr/>). In the context of OSM the most likely reason for this to be invoked is documented in

- (1) b) *the data subject withdraws consent on which the processing is based according to point (a) of [Article 6\(1\)](#), or point (a) of [Article 9\(2\)](#), and where there is no other legal ground for the processing;*

Our current practice is on account deletion to remove the display name, diary entries, diary comments and access to the users profile page, but to retain the e-mail address (which is never public) internally. Contributed geodata continues to be distributed.

It should be noted that there are no conditions for revoking consent and personal data has to be removed unless there is an *other legal ground for processing*. For geodata and metadata related to data integrity, legitimate interests lawful grounds may apply, as discussed above.

For other personal data, essentially this is the account specific data that we do not distribute (the e-mail address for example), we could argue again the the OSMF has a legitimate interest to retain such data for vandalism and similar protection.

We believe that this will continue to be defensible under the GDPR, however while this is reflected in new data dumps and the API, it is not in dumps prior to the account removal.

According to advice received, we should apply this retroactively to the existing dumps and we should also remove any metadata linking contributions to a specific account (at least uid and display name).

The GDPR extends these obligations to third parties in

(2) Where the controller has made the personal data public and is obliged pursuant to paragraph 1 to erase the personal data, the controller, taking account of available technology and the cost of implementation, shall take reasonable steps, including technical measures, to inform controllers which are processing the personal data that the data subject has requested the erasure by such controllers of any links to, or copy or replication of, those personal data.

Which impacts any community service or other service that has consumed OSM data dumps.

There is no obligation that account deletion be automatized or/and immediate. However from a practical point of view we should be interested in keeping the workload generated by deletions (currently roughly 1 per day) to a minimum.

How does the 'Right to data portability' apply?

An often overlooked aspect of the GDPR and consequences for OSM is the Right to data portability in article 20 (<https://gdpr-info.eu/art-20-gdpr/>).

Diary entries, GPX traces and similar content would seem to be largely unproblematic and we could simply provide a mechanism to download the content in a suitable format. However the actual geo-data contributions are more difficult, as there may be residual contributions and associated rights when existing data has been edited. It may be enough to provide a download option in osmChange format of all changesets and stipulate that any existing data in the download is subject to the ODbL.

This right is only relevant if the processing of personal data is based on consent, if our processing is based on “legitimate interests” the right does not apply.

What are the obligations on OSMF operations?

The GDPR defines in article 4 (<https://gdpr-info.eu/art-4-gdpr/>) 7. to 10. roles that are relevant to the processing of personal data

7. ‘controller’ means the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data;...

8. ‘processor’ means a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller;

9. ‘recipient’ means a natural or legal person, public authority, agency or another body, to which the personal data are disclosed, whether a third party or not....

10. ‘third party’ means a natural or legal person, public authority, agency or body other than the data subject, controller, processor and persons who, under the direct authority of the controller or processor, are authorised to process personal data;

The OSMF is clearly in the role of a controller, our volunteer operations staff might be considered part of the OSMF for purposes of the GDPR, Third party projects, community and commercial, could be handled as contractually bound processors, or independent controllers. As requiring a data processing agreement (DPA) would seem to be a quite onerous requirement, particularly for community projects, the later model seems to be preferable.

Controllers are required (see below) to notify data subjects of their processing, as this would again be a rather high hurdle for small projects, the OSMF could facilitate this by providing the required information from the controllers to the data subjects on sign up (and later updates)..

Chapter 4 of the GDPR (<https://gdpr-info.eu/chapter-4/>) lays out in detail the obligations of controllers and processors.

Points of note:

- The controller needs to be able to demonstrate that the processing of personal data is in accordance with the GDPR. This implies at least documenting which data we process and how (<https://gdpr-info.eu/art-30-gdpr/>)
- The controller is only allowed to use a processor that provides suitable guarantees that the processing meets the requirements of the GDPR and requires a contractual arrangement between controller and processor.

- Processors and controllers not based in the EU need to designate a representative in the EU.
- The controller and the processors have obligations to notify the authorities and the data subject in the case of a personal data breach (in the case of OSM this would for example be access to the e-mail addresses).

Restrictions on transfer of personal data to third countries

Chapter 5 (<https://gdpr-info.eu/chapter-5/>) restricts the transfer of personal data to non-EU countries, there is no reason to believe that these do not apply to personal data processed by the OSMF.. Article 49 (1) a) however allows such transfer in the absence of adequacy determinations by the EU, if

the data subject has explicitly consented to the proposed transfer, after having been informed of the possible risks of such transfers for the data subject due to the absence of an adequacy decision and appropriate safeguards;

It is unlikely that a blanket consent for any transfer destinations can be obtained based on the above clause and it would seem best to restrict any transfers to countries where an adequacy determination has been made. The GDPR allows data transfers to countries with existing arrangements between the EU, most notably the USA to continue till a based GDPR adequacy determination has been made.

Recommendations

In making these recommendations we have tried to balance impact on the OSM community and operations against both the legal and ethical privacy requirements that we believe exist.

In particular we try to avoid complexity by making what data is available to the general public as privacy issue free as possible, but allowing bona fide community members and researchers complete access with a minimum of additional hassle. We have further tried not to tie the hands of operations and developers to exactly how these recommendations should be implemented.

While not a panacea we believe restricting access to the more problematic aspects of our data to logged in users that have agreed to a ToU document at least partially fulfills the requirement that we control what processing happens.

We suggest that our rationale why our processing of personal data is lawful should be based on “legitimate interests” (Art 5.(1) f) <https://gdpr-info.eu/art-5-gdpr/>). While this allows us to circumvent some of the more problematic impacts of the GDPR on OSM, it does require us to make determinations “*where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child*”.

We recommend to the OSMF board that the following actions and tasks are considered and implemented:

1. Complete privacy policy

The privacy policy will need to outline our rationale why our processing is lawful and cover the required information as set out in Art 13 (<https://gdpr-info.eu/art-13-gdpr/>).

We will need to review all systems operated under the OSMF umbrella for compliance with the policy (for example that they are not running google analytics, gravatar or similar).

2. Reduce data availability as proposed in Appendix B

Most consumers of OSM data do not need the metadata and discard it anyway. By removing essentially all metadata from general public distribution we greatly simplify the situation.

- The geo-data “dumps” and “diffs” without the metadata can be continued to be distributed to anonymous consumers as is.
- Applications that don’t require the metadata can still use read-only API endpoints.
- Account deletion only has to concern itself with our database and API and a small number of data consumers that will be known.
- We apply the data-minimisation principle..

3. Add Terms of Use for the API and website for logged in users that covers the privacy aspects

We need to lay down the rules as to what can be done with the data and what not:

- Editing the data will continue as is
- Scraping the website and the API for local storage should be explicitly disallowed
- Using the data for user and contribution profiling will either require a data processing agreement (and a similar agreement for research) or the the OSM data consumer needs to operate as an independent data controller (see below)..

4. Confirm consent to privacy terms and new ToU for existing users,

Reasoning: we need to have the same legal framework in place for all users.

5. Create framework for supporting third party controllers

Entities receiving full data (that is including metadata) are expected to operate as independent controllers. Such controllers are expected to inform the data subjects of their processing as outlined in Art.14 (<https://gdpr-info.eu/art-14-gdpr/>) . The OSMF can provide such controller supplied information to the users on sign up making the

logistics of doing so far simpler for the controllers. This might be accompanied by a confidentiality agreement between the controller and the OSMF.

6. Provide deleted users service (list of uids) to controllers

Part of the above mentioned agreements will be an obligation to remove relevant data for deleted users, the simplest approach to enable this is to provide such processors with a regularly updated list of uids or a corresponding API endpoint.

7. Create confidentiality agreements for all persons that have access to restricted data

This mainly concerns operations volunteers and DWG members that have access to non-public data (e-mail addresses etc), and to user data post deletion.

Impact Assessment

After the changes due to the licence change in 2012, adapting to the GDPR will be the biggest change in policies and procedures since “modern” (post 2007) OpenStreetMap has existed. It is important to gauge what impact the suggested changes will have both on OpenStreetMap data consumers and contributors.

In the end we need to balance the risk of not following the GDPR to the letter with both the effort needed to do so and the impact of the changes on the stakeholders in OpenStreetMap.

The general Public

People not further involved with the OpenStreetMap project will typically consume OSM data in the form of maps, search results, POI information and routing instructions. None of this would be impacted by the proposed changes (and no user metadata is required to generate such products), except that it can be argued that at least low precision “last modified” dates should be available for both historic data processing and quality assurance. .

OpenStreetMap Contributors

The main impact is that to access metadata (which user added/edited data, when the edit was made and so on) the contributors will need to be logged on and have agreed to a set of ToU.

Service Providers

Entities providing services based on OSM data will not need to change (with the exception of potential updates to their toolchains) anything as long as they are not doing metadata based quality assurance or validation.

QA and Data Validation Projects

Projects that actually use the metadata will be most impacted, however they would be, regardless of whatever model we suggest, subject to the GDPR and will need to adapt accordingly. They will need to provide the information as outlined in Art. 14 (<https://gdpr-info.eu/art-14-gdpr/>) to all OSM contributors and implement their own privacy policies and mechanisms.

Appendix A -The OSMF and Personal Data

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The document is intended for use in briefing of third parties, providing a tally of personal data or potentially personal data the OSMF utilizes and distributes and any known open questions with respect to the introduction of the GDPR in 2018.

OpenStreetMap

OpenStreetMap, short OSM, is a global volunteer project to collect and survey geo-data and distribute the results as open data. Starting in 2004 it has grown to be the go-to alternative data-provider in a market dominated by small number of commercial providers (TomTom, Here and as a service provider google) Coverage is particularly good in German speaking Europe and in many developing nations OSM is the only player with any notable data at all.

As of fall 2017, nearly 1'000'000 contributors have added to the OSM dataset and maps and applications based on OSM are widely used by small and large organisations of any kind, from purely commercial to humanitarian, worldwide. Notable large users of OSM data include Apple, the American Red Cross, Médecins sans Frontières, Facebook and many more.

It is important to note, that despite the name OpenStreetMap, we consider the data our primary product and we do not engage in providing apps and services to the general public in more than an incidental fashion. For example the US based company Mapbox is a commercial service provider re-using OSM data to provide services to companies worldwide. This is a different operating philosophy compared to Wikipedia which is the best known project OSM is similar to.

The main OSM website is at <http://openstreetmap.org/>

The OpenStreetMap Foundation

The OpenStreetMap Foundation, short OSMF, is a small non-profit organisation based in the UK that formally operates the infrastructure behind the OpenStreetMap project and distributes and licenses OpenStreetMap data to third parties.

The OSMF has roughly 500 members and a annual budget of £100'000. Membership dues, donations and profits from the annual global conference "State of the Map" are the main sources of income.

While the OSMF has an important formal role, it does not govern the project in any conventional sense of the word. Essentially all work is carried out by volunteers either by directly working on the data, taking part in OSMF working groups, or developing software..

More information on the OSMF can be found at <http://osmfoundation.org/>

The OpenStreetMap Licence

Between 2004 and 2012 the data collected by OSM was distributed on CC BY-SA 2.0 terms, in 2012 the licence was changed to the Open Database Licence (ODbL) see <https://opendatacommons.org/licenses/odbl/>

The change included a switch from a model in which every contributor licensed their data individually to a model in which the OSMF licenses that data to third parties. To facilitate that contributors have to agree to a set of contributor terms https://wiki.osmfoundation.org/wiki/Licence/Contributor_Terms which not only includes the grant of the necessary rights to the OSMF it binds the OSMF to only distribute the contributions on the terms laid out in the agreement.

OSM User Accounts

To contribute to OSM an user account on openstreetmap.org is required. Contributors need to supply a display name (can be changed at any time), a working e-mail address (can be changed at any time) and agree to the contributor terms mentioned above.

We do not require any further user information. The e-mail address is used internally by our systems to send notifications and is only accessible to system administrators.

Users have access to a simple publicly accessible “user page” on which they can add some information about themselves, can create diary entries, can add a home location to their account, can add a picture or enable gravatar support and have access to the OSM messaging system. However none of this is required. It should be noted that users can, and sometimes do, choose their personal name as a display name.

There are currently roughly 4.2 million user accounts of which 1 million have contributed to the project. Users can have multiple accounts which is typically the case if they are engaging in special projects for which they want to keep the contributions separate from their regular work.

Simply consuming services and data provided by OSM does not, in general, require an account.

Data distributed to the public by the OSMF

The data distributed by the OSMF contains, besides geometry and properties of the geographic objects and so called Notes (short geo-referenced texts that point out an issue or similar at a specific location), metadata including

- A “changeset” id that links together all contributions that were made in one editing “session”
- A timestamp
- The computer-generated numeric ID of the user account
- The display name of the user account
- Metadata associated with the editing session, editing program used, comments by the user, sources used, imagery used and other fields. None of this is mandatory and some is added automatically by the editing programs, sometimes undetectable by the users. The OSMF does not have control over the editing programs.
- Comments made by the user on other users changesets and notes.

Separately from the above:

- GPS generated traces that the users have uploaded and allowed to be publicly provided (metadata availability can be set by user uploading the traces)
- A map rendering of the above traces, currently this is immutable in the sense that traces cannot be removed from the rendering.

All of the data is provided in the form of “dumps” chronologically created and named files containing all of the respective data at the time of creation. These files are normally final and are not changed after they have been stored. Many of these dumps are regularly downloaded and utilized by third parties.

The sum of data contributions, user name, GPX traces and other provided information currently makes it easy to fingerprint individuals and associate at least editing patterns if not more with such an individual.

We currently do not have explicit terms of use covering how user metadata can be utilized that is retrieved from the data dumps. Our data distribution licence does not limit use in any way.

The distribution location is <http://planet.openstreetmap.org/>.

Data available publicly via the API

The OSMF provides access to the data via an API. While this is primarily intended for use for editing and adding data for our contributors, the data retrieval functions of the API can be accessed by anybody.

The data publicly accessible by the API includes the information in the dumps plus

- Account created data
- Flag indicating if the contributor terms were agreed to
- Number of changesets/edit sessions, which is also derivable from dumps

- Number of uploaded GPS traces
- Number of blocks received total (a block stops the user from logging in)
- Number of active blocks
- Number of blocks issued, only in the case of user information for “moderator” users
- Gravatar (if the user has turned on gravatar support, which is highly problematic from a privacy point of view) or picture link
- Role (empty except for administrators/moderators)
- Any user provided description

The non-editing functions of the API are available for programmatic access by all comers. We currently do not have explicit terms of use covering how user metadata can be utilized that is retrieved via the API.

Data available publicly via the openstreetmap.org website

A small amount of information is only available via the OSM website.

All of the already mentioned data plus

- User home location marker (if set), only visible to logged-in users
- Diary entries (available via RSS feed too) and comments
- Block messages

We currently do not have terms of use for the website including use of user metadata obtained from it.

Non-public data

The systems operated by the OSMF generate log files in various formats that are retained for an unspecified amount of time and are only available to system administrators. The data includes Internet protocol addresses and website navigation data.

Further e-mail addresses supplied during the sign up process are only visible to the system administrators.

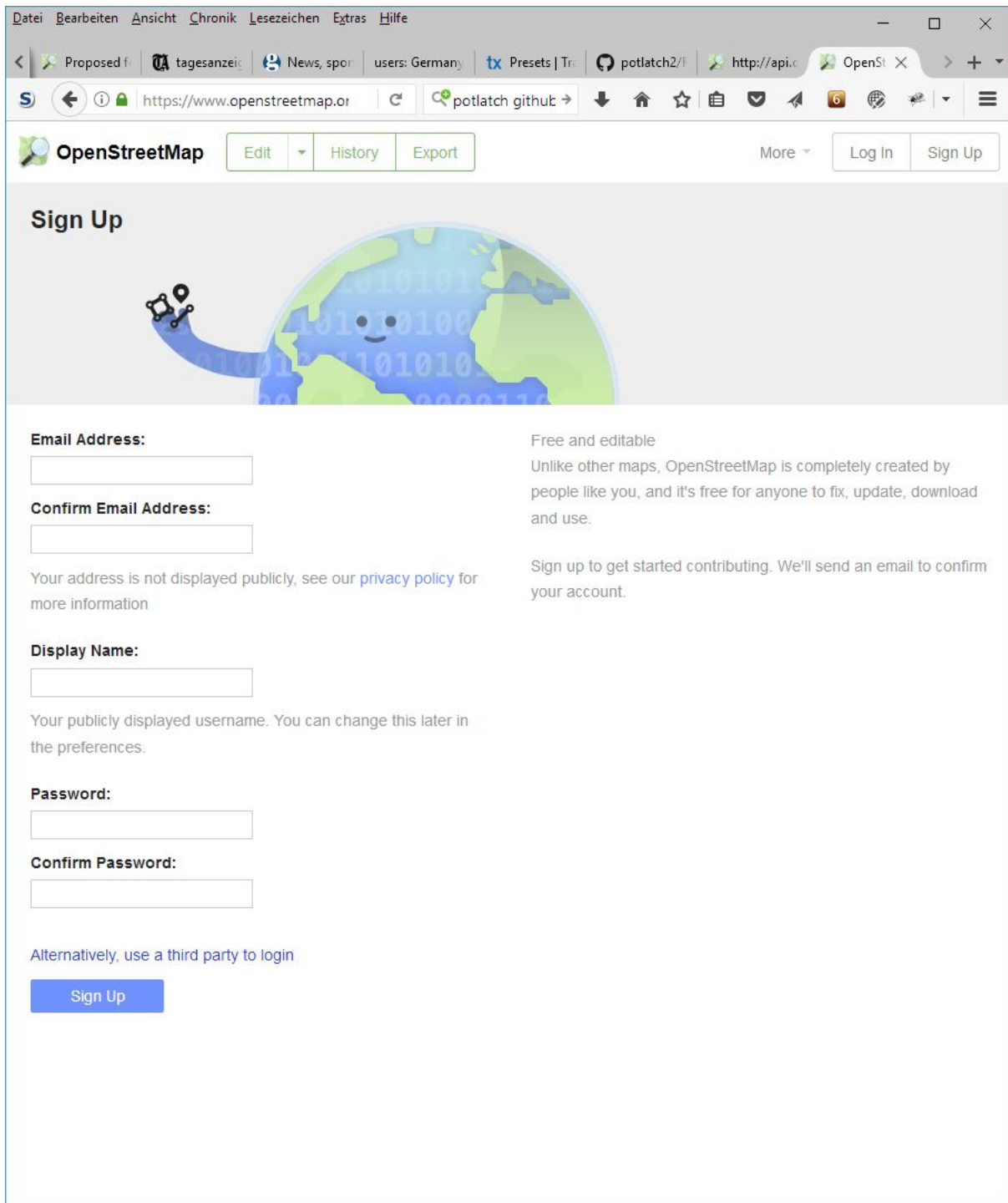
Other notable internal user related data stored in the database

- List of “friends”
- Flag indicating if user considers their contributions public domain
- Received and sent personal messages

All the above data is only used for internal and security purposes and is not distributed to third parties.

Privacy policy

The OSMF privacy policy can be found at http://wiki.osmfoundation.org/wiki/Privacy_Policy a link to the document is provided during the sign-up process (see below) however the new user does not have to explicitly acknowledge acceptance of it.



The screenshot shows the OpenStreetMap sign-up page in a browser. The browser's address bar shows the URL <https://www.openstreetmap.org>. The page has a navigation bar with 'OpenStreetMap', 'Edit', 'History', and 'Export' buttons, along with 'Log In' and 'Sign Up' buttons. The main content area is titled 'Sign Up' and features a cartoon globe character with a smile and a hand holding a key. Below the character are several input fields and text blocks:

- Email Address:** An input field for the user's email address.
- Confirm Email Address:** An input field to confirm the email address.
- Display Name:** An input field for the user's public username.
- Password:** An input field for the user's password.
- Confirm Password:** An input field to confirm the password.

Text on the right side of the page includes: 'Free and editable', 'Unlike other maps, OpenStreetMap is completely created by people like you, and it's free for anyone to fix, update, download and use.', and 'Sign up to get started contributing. We'll send an email to confirm your account.' At the bottom, there is a link 'Alternatively, use a third party to login' and a blue 'Sign Up' button.

OSMF Member Data

The OSMF holds information on its members, roughly 420 members according to the UK Companies Act, 240 associate members and 20 corporate members.

The membership data for normal users (<https://join.osmfoundation.org/normal-membership/>) is entered in the the membership register, is not removed from that if membership is terminated and can, in principle, be inspected by anybody (this is all a legal requirement of the companies act).

Associate member submit far less data and access to this data is set out in the articles of association, not in the companies act.

Details on the membership classes are presented before signup here
<https://join.osmfoundation.org/>

Membership data, including some payment-related information, can be accessed by the members of the OSMF “Membership Working Group” that have signed a confidentiality agreement with the foundation.

Examples

HDYC

HDYC (<http://hdyc.neis-one.org/>) is a privately operated website (“How Did You Contribute”) displaying information on individual OSM contributors. All information displayed is obtained from publicly available OSM data. Since 2017 the site requires an OSM login to access, previously it was completely public. Earlier versions included more detail, for example information on which time of day contributions were being made.

How did you contribute to OpenStreetMap?

SimonPoole Search

Name: SimonPoole
Mapper since: January 18th, 2009
Project days: 3162
Active mapping days: 1870 (59.1%)
GPS-tracks: 305
Changesets: 8 161
Map changes: 820 197

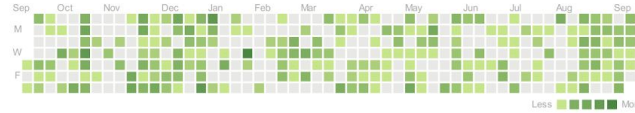


Related OSM accounts
 1. OSM Wiki: Editcount 2608

Type? Super Mapper (Highly Active)

Recent activities in Switzerland 77 Indonesia 16 Germany 9 changesets
OSM Notes: Closed with comment 7 (w/o 36), commented 14 and 35 opened
Changeset discussions: Participated in 117 and created 147 comments
Discussed changesets: 15

Activity calendar of all contributions for the past 12 months (overall 211 mapping days)



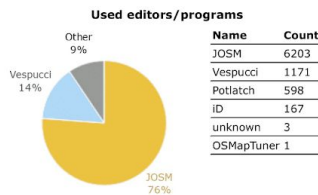
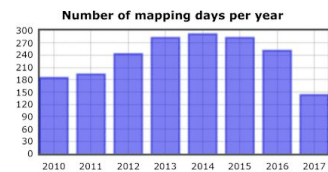
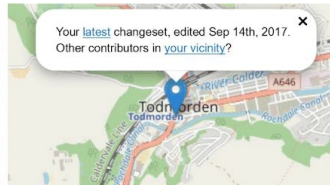
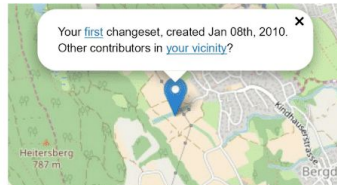
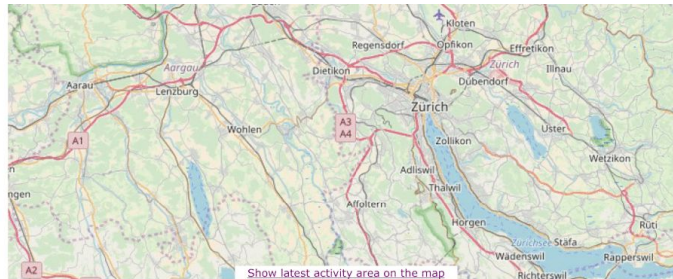
Name: SimonPoole (UID 92387)	Nodes	Ways	Relations
Created:	336 092	41 133	383
Modified:	320 665	76 332	3 289
Deleted:	36 301	5 017	274
last modifier of:	522 263	64 688	318
has the following ranks:	#1376	#1244	#2148

Changesets	With comments	Unique comments	Median length
8 161	7 923	4 931 (60.4%)	33.00
Amount of map changes			
<15 changes:	>15 <150 changes:	>150 changes:	
3 302 changesets	3 177 changesets	1 682 changesets	

Last Modifier of way-objects with the following tags (% of all last modifier ways of the user)

Amenity	Building	Highway	Landuse	Leisure	Name	Natural	Addr:*
547 (1%)	36 266 (56%)	26 176 (40%)	635 (1%)	144 (0%)	13 727 (21%)	182 (0%)	25 166 (39%)

























Main & latest (6 months) activity area - First created & latest changeset



Changesets per country - Overall 48 countries

(Country - Number of changes (changesets))

- Switzerland - 676 287 (6 874)
- United States - 65 864 (439)
- Australia - 21 770 (140)
- Germany - 20 855 (232)
- Philippines - 7 010 (79)
- China - 6 476 (9)
- Indonesia - 2 905 (17)
- Guinea - 2 496 (20)
- Ghana - 1 983 (7)
- Nepal - 1 943 (15)

	Italy - 1 458 (21)		??? unknown - 1 353 (96)		Canada - 1 268 (6)
	Austria - 1 137 (45)		Ecuador - 1 021 (7)		Spain - 908 (4)
	South Africa - 864 (9)		Argentina - 633 (41)		France - 598 (8)
	Liechtenstein - 573 (4)		Denmark - 511 (25)		United Kingdom - 419 (15)
	Sierra Leone - 270 (1)		Algeria - 237 (1)		Sweden - 212 (1)
	Malawi - 168 (2)		Serbia - 153 (2)		Japan - 150 (2)
	Malta - 118 (1)		Netherlands - 117 (4)		North Korea - 112 (1)
	Liberia - 111 (1)		New Zealand - 49 (4)		Uruguay - 49 (1)
	Chad - 44 (2)		Egypt - 26 (1)		Belgium - 11 (9)
	India - 9 (3)		Finland - 6 (1)		Cameroon - 6 (1)
	Bolivia - 5 (2)		Cuba - 4 (1)		Cyprus - 2 (1)
	The Bahamas - 2 (2)		Portugal - 1 (1)		Taiwan - 1 (1)
	Somalia - 1 (1)		Hungary - 1 (1)		

Share it? Here is your [Link](#) - **More about the contributor?** Check the [OSM-usersite](#) or [Where did you contribute to OSM?](#)

OSMCha

OSMCha <https://osmcha.mapbox.com/> is a privately operated, public (logins are only required to set filters and to review changesets), quality control site that displays edits in real time and allows access to user metadata.

Specific Questions

“Right to be forgotten”/Account deletion

Is retention of

- Contributed data
- E-mail address (only available to administrators) possible going forward?

Deleting an account does not affect the above mentioned data dumps, is that problematic?

Changing the display name does not affect already generated and archived data dumps, is that problematic?

Currently “deleting” an account is a manual process that requires sending e-mail to a system administrator, does that have to be possible directly by the user? Note currently we delete a couple of 100 accounts each year.

Children

As mentioned above we currently completely ignore the issue of if contributors are children or not, is there a requirement that we actually ask for age information (which naturally in turn would lead to other complications) so that we can apply the age limits in Art. 8? While we don't specifically target children as a contributor group we do now and then have school classes participating and other organised groups (scouts etc), so we probably do actually have younger than 16 kids with accounts.

Sign-up process

Do we need to get explicit agreement to the privacy policy?

Privacy policy

Are there important point missing?

Are all of the provisions legally sound with the new regime?

Operational questions

All the operational "staff" are currently volunteers and are not employed by the OSMF, should we be taking any specific steps wrt data protection legislation to formalize some aspects of the relationship? Current requirements for joining the the sysadmin group <https://operations.osmfoundation.org/policies/sysadmin-membership/>

Appendix B - Detailed proposed data availability and access

Red = access removed

Item	Website public	Website logged in	API public	API logged in	Dumps and diffs public	Dumps and diffs with ToU	Ops only	Deleted on account removal
Geo data (without metadata)	X	X	X	X	X	X		
Display name	X	X	X	X	X	X		X(3)
UID	X	X	X	X	X	X		
Time stamps	X (1)	X	X (1)	X	X (1)	X		
Changeset id	X	X	X	X	X	X		
Changeset tags	X	X	X	X	X	X		
Changeset comments	X	X	X	X	X	X		
Notes (text and discussion without metadata)	X (4)	X	X (4)	X	X	X		
GPX traces (without metadata and according to the privacy setting)	X (4)	X	X (4)	X	X	X		
Account creation date	X	X	X	X				X(3)

Contributor terms flag		X	X	X	X	X		X(3)
Number of changesets	X	X	X	X				
Uploaded GPS traces count	X	X	X	X				
Number of blocks received		X	X	X				X(3)
Number of active blocks	X	X	X	X				X(3)
Number of blocks issued		X	X	X				X(3)
Block messages	X	X						X(3)
Gravatar / Image	X	X	X	X				X
Role		X		X				X
User provided description	X	X		X				X(3)
Home location		X						X(3)
Diary entries	X	X						X
Diary comments	X	X						X

e-mail							X	
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- (1) It can be argued that completely removing timestamps causes a significant loss of functionality and information, for example when an object was last updated. This could be partially rectified by simply reducing the granularity of the timestamps in publicly available data, for example by only displaying dates.
- (2) User edits only in osmChange format
- (3) This data is potentially useful for combating vandalism and should only be removed from the public API and website.
- (4) In the website UI access to this data is via the users profile page which naturally de-anonymizes the data.