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Description of services relating to the ETH web core area: Service Level Agreement (SLA) between Corporate Communications (service provider) and ETH organisational units (service recipients)

Contents

Version review

Version	History / status	Date	Author	URL
0.1	First draft of new edition	15.11.2015	Wolfgang Sichler	https://mysite.sp.ethz.ch/personal/wsichler/_layouts/15/WopiFrame.aspx?sourcedoc=/personal/wsichler/Documents/Dienstleistungsvereinbarung%20f%C3%BCr%20Kernbereich%20ETH-Web.docx
0.2	Amendment regarding service owner	18.11.2015	Rainer Borer	Merely copied from Web Policy
1.0	Amendments	02.01.2016	Wolfgang Sichler	Comments incorporated. Amendments predominantly in section 6 (retired staff, termination ..)
1.1.	RBo comments	20.1.2016	Rainer Borer	Comments and amendments
3	Revision by WS	21.01.2016	Wolfgang Sichler	A range of feedback incorporated, improved description of qualitative aspects of the services
4	Revision by WS	22.01.2016	Wolfgang Sichler	Feedback from meeting / costs
4.1.	Fine-tuning by RBo	22.01.2016	Rainer Borer	Still awaiting feedback from CC team!
4.2.	Comments from Katrin Schmid	25.1.2016	Katrin Schmid	(Incorporated by RBo)
5	Finalisation	27.01.2016	Wolfgang Sichler	Feedback and comments incorporated Finalised
5.1	Editorial amendments	01.02.2016	Wolfgang Sichler	Amendments - CC feedback
6	Finalisation	05.02.2016	Wolfgang Sichler	Minor spelling corrections
7	Revision and finalisation following consultation	21.07.2016	Wolfgang Sichler	Feedback from consultation process incorporated. Minor amendments in line with Web Policy

1. Service description

The “ETH web core area” service package comprises a web content management system (Web CMS) package, templates based on the ETH Corporate Design and advisory and support services.

Corporate Communications (CC) is responsible for supplying the Web CMS package and relevant services across ETH. The package enables all ETH organisational units to create and administer webpages in a professional manner.

The services provided by CC are described in this document. In the capacity of service provider, CC is responsible for controlling, ongoing development and quality assurance related to the ETH web core area. CC has delegated responsibility for technical matters (operation, maintenance etc.) to IT Services under an Operational Level Agreement (OLA).

2. Benefits to the service recipients

The web constitutes the core ETH Zurich communications tool and is crucial to cultivating and building the reputation of ETH. The ETH web serves as an information platform to prospective students, employees, students, sponsors and investors as well as partners in industry, politics and society.

Using a common web CMS with a standardised Corporate Design enables ETH Zurich to create an attractive and easily recognisable web identity that achieves a high level of brand recognition. A visually consistent website serves to reinforce the ETH brand.

A standardised website that meets the basic accessibility requirements provides a straightforward user experience, as users do not need to relearn functions and structures every time and can follow the same paths to locate the required information more quickly.

Assigning responsibility for systems and applications to CC ensures that service recipients have a single point of contact. Assigning responsibility for technical matters to IT Services ensures that services are of a consistent high quality. Assigning these responsibilities also frees service recipients from performing these tasks.

2.1. Supported processes

The service is intended to provide support to service recipients in relation to webpage design, editing content and the publication process.

Examples of potential web content are set out below. The list is not all-inclusive.

- Presentation of fields of research and research findings
- Publication of news items on ETH news channels
- Publicising successes, honours and awards
- Descriptions of organisational units and profiles of individuals
- Information about events, e.g. special lectures, tours and other activities
- Information on the range of internal services available
- Descriptions of stand-alone and cross-cutting projects
- Information on policies and directives

2.2. Functionality and features

The following **infrastructure** (hardware, firmware, database, interfaces to other systems etc.) shall be provided to service recipients within the ETH web core area for content publication purposes:

- An authoring system which is monitored on an ongoing basis
- Two (geo-redundant) publication systems deployed at two different locations which are monitored on an ongoing basis
- Systems updates at all levels (operating system, development environment, applications) by implementing patches and upgrades
- Systems backup to ensure recovery in the event of a crash

The ETH web core area provides the following **software** to service recipients:

- Web content management system
- Webpage templates that are consistent with the Corporate Design
- Additional components and functions within the web CMS that comply with ETH specifications
- Interfaces for displaying data from ETH applications and databases (e.g. Course Catalogue, Operational Information System, eCitations, Addresses and Personal Data).
- Integrated full text search for non-protected areas (Google)
- Authorisation and role concept

The following support **services** shall be provided to service recipients within the ETH web core area:

- Author training: Corporate Communications
- Advice to authors on website design and structure: Corporate Communications
- First level support: the IT Service Desk shall always be the first point of contact for service recipients. The IT Service Desk is responsible for performing triage and escalating incidents to second level support.
- Second level support: Corporate Communications is responsible for providing second level support in respect of content-related, structural or design issues. ITS User Services is responsible for providing second level support in relation to technical incidents or problems.
- Third level support: any issues that cannot be resolved through first or second level support shall be passed on either to ITS Software Services (ITS SWS) or to Adobe.
- Corporate Communications shall gather, assess and define the requirements for developing new functions for ETH or specific organisational units. ITS shall determine the relevant specifications and develop the new functions on behalf of CC.
- Maintaining the community of authors: Corporate Communications
- Documentation and guides: Corporate Communications

IT Services shall provide a separate “web archiving” service for websites that are no longer required.

IT Services shall provide a separate “web statistics” service for the purpose of analysing website access statistics.

2.3. Value

Maintaining the system and applications centrally generates the following efficiency gains for service recipients of the ETH web core area in comparison to operating webpages independently:

- The infrastructure (server) costs shall be met by IT Services.
- The costs associated with author licences shall be met by Corporate Communications and IT Services.
- Corporate Communications shall meet the costs of in-house developments intended for a majority of ETH users.
- Corporate Communications shall meet any personnel costs associated with setting up the initial website structure and authorisations.
- IT Services shall meet any personnel costs associated with maintaining the system (patches, updates, backup, monitoring etc.).
- Minimal outlay on training as authors do not require in-depth knowledge of the system.
- Consolidated interface development.

In addition, a consistent online presence in line with the ETH Zurich Corporate Design constitutes an intangible asset, ensuring higher quality and more effective communications, a stronger ETH Zurich brand and a raised profile.

2.4. Scope

The service does not include the creation and preparation of content and data. Service recipients are responsible for performing these tasks.

It is generally feasible to develop specific components or functions for just one or a small number of organisational units. However, the service recipients ordering such components or functions are responsible for paying all associated costs. The service provider shall, in consultation with IT Services, verify the viability, benefits and impact of the specifications on system stability and design.

The funds available for the basic assignment do not cover large-scale developments and modifications resulting from software updates (major releases), which must be funded separately under a new project budget.

Service recipients are responsible for the quality of any data from other systems that are displayed through interfaces within the ETH web core area.

The Digital Asset Management (DAM) facility within the web CMS is designed for storing web content files, but is not suitable for general storage of images, videos, large software programs, system images, download files etc. IT Services provides more appropriate file share services for these purposes.

3. Quality attributes

The ETH web core area essentially comprises the following systems: a) the authoring system where authors can create content and b) the two publication systems where content can be published. Different quality attributes apply to the separate systems. All references to times below are to Swiss time.

3.1. Availability

Corporate Communications warrants to service recipients that the ETH web core area will be available as specified below. Corporate Communications shall procure the necessary infrastructure from IT Services, including the relevant quality attributes stipulated, such as the level of availability. CC and ITS have entered into an Operational Level Agreement (OLA) for such purpose.

Authoring system (back end):

In the event of an outage of the authoring system, authors' ability to create new content or change existing content may be hindered or restricted. Even in the event of a total failure of the authoring system, published website content may still be accessed through the publication system.

The authoring system shall have a 99.5% availability level between 8.00 a.m. to 5.00 pm on week days (= maximum downtime of one hour per month or twelve hours per year). This time period shall be put forward or back, as appropriate, for offices in different time zones (e.g. Singapore).

Interruptions caused by routine maintenance work shall not be counted as downtime. The malfunctioning of specific websites, or parts thereof, due to

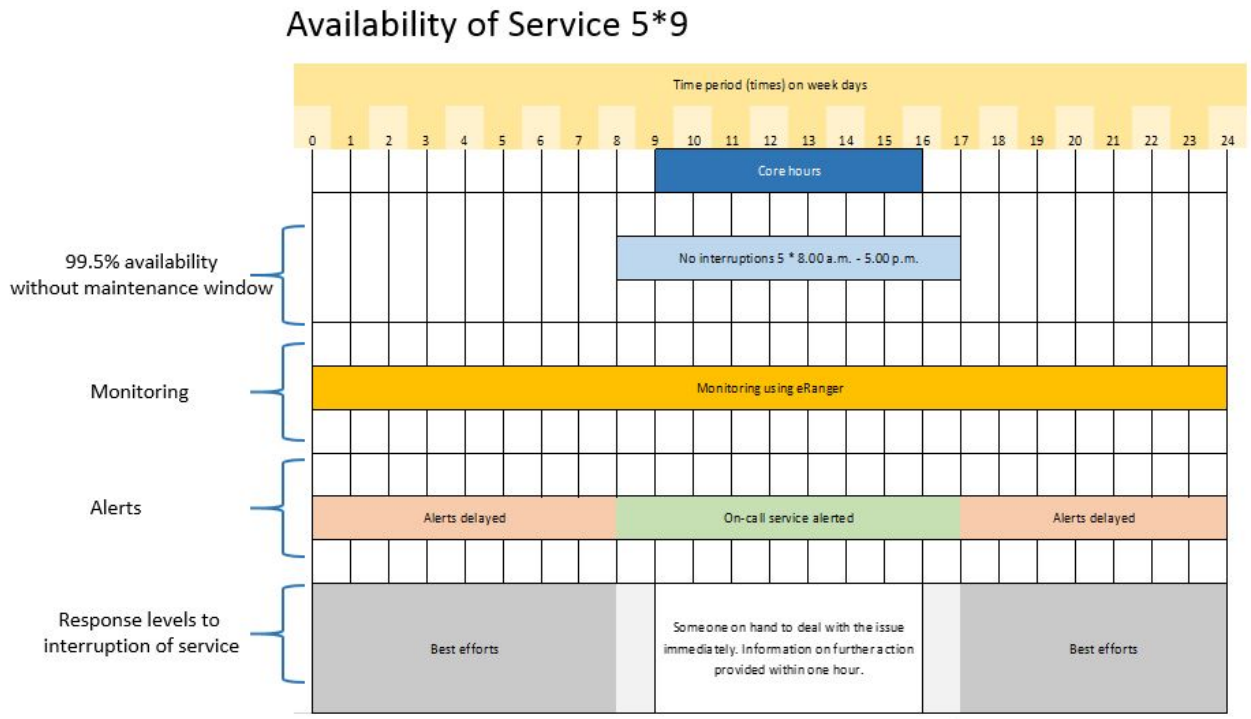
- the unavailability of external data sources,
- incorrectly referenced pages or
- errors caused by authors in creating content

shall also not be counted as downtime.

The authoring system shall normally be available to authors between 4.00 a.m. and 11.00 p.m. Access is barred between 11.00 p.m. and 4.00 a.m. to ensure consistent backup. The following parameters apply in respect of availability, monitoring and alerts:

- Target availability: no interruptions between 8.00 a.m. and 5.00 p.m. on week days
- Potential maintenance windows: normally outside core hours, as infrequently as possible within core hours and generally subject to a minimum of two weeks' notice
- Target restoration of service following an interruption (within core hours): two hours
- Target restoration of service following an interruption outside core hours on week days: two hours or 8.00 a.m. the following morning
- Target restoration of services following an interruption on weekends and public holidays: two hours or 8.00 a.m. on the following working day
- Response time core hours (9.00 a.m. – 4.00 p.m.): an ITS specialist shall be on hand to deal with any issues immediately. Information on further action shall be provided within one hour.

- Night-time response level: an ITS specialist shall deal with the issue immediately following any delayed alert received between 5.00 p.m. and 8.00 a.m. on week days. Information on further action shall be provided within one hour.
- Response level at weekends and on public holidays: start of the next working day (8.00 a.m.).



Publication system (front end):

Webpages within the ETH web core area are normally available around the clock. If an incident occurs on one part of the publication system, the published pages may still be accessed on the second publication system. Access to pages will only be impeded in the event of the failure of both parts of the publication system.

The publication system shall be available 99.95% of the time between the hours of 6.00 a.m. and 10.00 p.m. (= maximum downtime of 15 minutes per month or four hours per year).

Interruptions caused by routine maintenance work shall not be counted as downtime.

The malfunctioning of specific websites, or parts thereof, due to

- the unavailability of external data sources,
- incorrectly referenced pages or
- errors caused by authors in creating content

shall also not be counted as downtime.

The following parameters apply in respect of availability, monitoring and alerts:

- Availability: no interruptions between 6.00 a.m. and 10.00 p.m. seven days a week.
- Maintenance windows: within core hours, but as infrequently as possible and subject to a minimum of six weeks' notice; normally outside core hours.
- Target restoration of service following an interruption (within core hours): two hours.

- Target restoration of service following an interruption outside core hours on week days: two hours or 8.00 a.m. the following morning
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- Target restoration of services after an interruption on weekends and public holidays: two hours or 8.00 a.m. the following morning
- Response time core hours (9.00 a.m. – 4.00 p.m.): an ITS specialist shall be on hand to deal with any issues immediately. A decision regarding further action shall be made within one hour.
- Night-time response level: an ITS specialist shall deal with the issue immediately following any delayed alert received between 10.00 p.m. and 6.00 a.m. on week days. A decision regarding further action shall be made within one hour.
- Response level on weekends and public holidays: an ITS specialist shall deal with the issue immediately following any delayed alert received between 10.00 p.m. and 6.00 a.m. on week days. Information on further action shall be provided within one hour.

3.2. Performance / capacity

Authoring system (back end):

The authoring system shall be deemed to be operating properly if authors are able to create new content or change existing content efficiently. Dedicated test pages shall be rendered within two seconds within 90% of operating hours. This shall also be measured in respect of locations outside ETH.

Publication system (front end):

The publication system shall be deemed to be performing adequately provided that it is possible to render webpages efficiently in line with expectations. Dedicated test pages shall be rendered in less than two seconds within 90% of operating hours. This shall be measured using the monitoring tool and also in respect of locations outside ETH.

New or changed content shall be published as soon as possible, or within 30 minutes at the latest.

3.3. Service continuity

Authoring system (back end):

The authoring system shall be backed up incrementally on a daily basis to enable the system and data, in particular, to be restored as swiftly as possible following a crash.

The maximum tolerable period in which data may be lost is 24 hours (recovery point objective (RPO)).

The restore process currently takes a maximum of 30 hours.

If it is subsequently necessary to re-index content, the authoring system may be out of service for up to six days.

The maximum time required to restore the authoring system following total system failure

(recovery time objective (RTO)) shall be six days.

Publication system (front end):

The two publication systems are geo-redundant, i.e. installed at two different locations. Accordingly, a failure of the system at either location will not cause the entire system to fail.

The publication system shall be backed up incrementally on a daily basis with a view to restoring the system as swiftly as possible following a crash. The restore process currently takes a maximum of 30 hours.

3.4. Scheduled and unscheduled maintenance windows

Authoring system (back end):

Any maintenance work that is likely to disrupt service shall be carried out during the maintenance windows which are scheduled well ahead of time. Two weeks' notice of any maintenance work shall be given. Notice of any unscheduled maintenance windows shall be given as soon as possible.

Publication system (front end):

The redundant configuration of the publication system allows maintenance work to be carried out during operation without interruption of service.

3.5. Security

The usual security measures for exposed systems (firewall, patches etc.) shall be implemented. If the automatic system monitoring tool detects any irregularities (e.g. security breaches), IT Services shall temporarily take the affected systems offline.

4. Measurement of quality

4.1. Definitions

Availability, performance and load shall be measured and the information placed online.

4.2. Availability of reports

The components required for the ETH web core area (Apache server, CQ5/AEM publication server, CQ5/AEM author server) and the various interfaces shall be monitored by means of the monitoring tool.

Active monitoring shall be performed, i.e. the monitoring tool shall operate 24x7. Once an incident is registered, the on-call service shall be alerted (cf. section 3.1.). The on-call service shall initiate the necessary steps.

4.3. Verification of capacity / performance

The number of authors registered concurrently shall be measured to determine the capacity of the authoring system. This process shall also be used for the purpose of monitoring licences.

Access to individual dedicated test webpages on the authoring and publication systems shall be measured for the purpose of assessing performance, as this provides a reliable indication of performance.

5. Administrative matters

5.1. Ordering new websites

Any decentralised organisational unit of ETH Zurich, which does not already have a website within the ETH web core area, may order a new website by completing the appropriate form[1].

Central organisational units do not have their own websites. Their websites shall be incorporated within the main site or student portal.

It is possible to order special websites for stand-alone or cross-cutting projects.

It is not necessary to complete the ordering procedure for add-ons to existing websites.

The service provider shall review applications for new websites. Provided the applicant is entitled, pursuant to the Web Policy and CD Guidelines, to maintain a website conforming to the ETH Corporate Design, Corporate Communications shall normally set up a prototype site within two weeks and provide the login information by email.

Once the website is completed, the service user may request a quality check from CC. Once the service user has made any adjustments that are necessary, CC shall arrange for the website to go live with ITS User Services. Quality checks are normally completed within two weeks, while the “go live” process takes approximately one week.

5.2. Ordering new components, functions or interfaces

Any service recipient may order new components, functions or interfaces from Corporate Communications via a ticket. Any specifications for changes and add-ons to existing components and interfaces may also be notified to the service provider via a ticket.

All submissions shall be prioritised and transferred to Release Planning for the ETH web core area services. There shall be no entitlement to immediate implementation. Implementation will depend on feasibility and the resources available.

The funds available for the basic assignment do not cover large-scale developments which must be funded separately under a new project budget. Where specifications are only of benefit to the applicant, all associated development costs must be met by the applicant.

[1] https://www.ethz.ch/services/en/service/communication/websites/migrating-existing-websites/website-registration.html

5.3. Support and support hours

All support requests shall be routed through the central IT Service Desk. The Service Desk shall forward any requests received to the appropriate authority or escalate the request where required. All communications shall be monitored and checked to ensure that internal quality standards are maintained.

IT Services specialists are available for troubleshooting issues between 9.00 a.m. and 4.00 p.m. on week days.

The target maximum response time for incidents reported during office hours is four hours. “Response time” means the time from receipt of the incident report until initial diagnosis. No warranty is made with respect to “time to repair”.

5.4. Escalation

Functional escalation

Horizontal, functional escalation involves referring unresolved queries to a team with greater expertise or more extensive rights or access levels.

If the ITS Service Desk cannot resolve a query as part of first level support, the functional escalation process will be initiated. Incidents shall be referred to the next level in the escalation process, i.e. either the Corporate Communications web team or ITS User Services. Any query that cannot be resolved by either of these shall be referred to ITS Software Services. If it is not possible to find a solution within ETH, ITS User Services shall open a ticket with Adobe.

Hierarchical escalation

Hierarchical, or vertical escalation means that a higher level of management is consulted or notified. This may be necessary for incidents involving high levels of damage where the service is significantly restricted or there is disagreement as to the level of service provision.

Under the hierarchical escalation procedure, incidents shall be escalated as follows:

- Staff on the Corporate Communications web team
- Head of Corporate Communications
- Executive Board

5.5. Documentation / training

Corporate Communications provides extensive documentation, including examples and best practice, which is available at https://www.ethz.ch/web-manual.

Where required, Corporate Communications will arrange appropriate training courses for users of the ETH web core area. It is possible to register for courses from the following link: https://www.ethz.ch/web-courses

If required, IT Services may also provide courses on the use of JSON and script node components for authors wanting to integrate external databases.

5.6. Restrictions / requirements

The ETH web core area service is only available to organisational units at ETH Zurich.

It is also possible for ETH organisational units to set up websites in cooperation with external organisations, provided that ETH has the lead role under the cooperation arrangement.

The provision of services to ETH-related organisations is subject to approval by the Executive Board.

5.7. Obligations of service recipients

Service recipients shall ensure compliance with the ETH Zurich Acceptable Use Policy for Telematics Resources ("BOT") and the Web Policy within their area.

Each academic department, administrative department and Executive Board domain shall appoint a Web Coordinator. The Web Coordinators shall serve as the first point of contact within their organisational unit for web-related queries submitted by other authors within their own area and shall assume a type of "super user" role in relation to queries concerning the operation of the web CMS. The Web Coordinators shall also deal with any queries from the service provider.

5.8. Obligations of the service provider

In the capacity of service provider of the ETH web core area service, Corporate Communications shall, in accordance with the Operational Level Agreement (OLA) with IT Services, keep systems up-to-date, in line with the latest technology, with a view to achieving the highest levels of security and availability.

5.9. Life cycle management

The service provider reserves the right to replace individual components with new, better-performing components. Any upgrades to the systems required for the service may entail changes to the service. Clients shall be informed of any such changes as soon as possible. Clients shall also be consulted regarding major changes, e.g. any change of web CMS.

Corporate Communications shall work in close cooperation with IT Services to expand the range of service functions on a continuous basis by upgrading the CMS web software and performing its own development work. Any such development work shall be carried out at the request of service recipients and in consultation with them.

5.10.Termination

Termination by service recipients

Recipients of the ETH web core area service, who are not required under the Web Policy to use this service to create webpages, may terminate this Agreement at any time by giving three months' notice. Service recipients may submit requests to the service provider for websites to be removed using the online form (https://www.ethz.ch/services/en/service/communication/websites/taking-an-aem-website-

offline.html). The service provider shall subsequently arrange for the website to be removed and archived and shall inform the service recipient once the archived version is available.

Termination due to disbandment of organisational units or completion of projects

Websites for disbanded organisational units or completed projects are not updated. In many cases, the individuals responsible for such websites will no longer be available. Accordingly, the service provider shall archive and subsequently remove the websites in consultation with the organisational unit to which the former service recipient reports.

5.11. Provisions applying to retired professors

Retired professors may let their webpages within the ETH web core area expire in accordance with Article 10(4) of the Web Policy. The service provider shall provide a special URL, i.e. www.emeritus.institutx.ethz.ch or www.emeritus.departementx.ethz.ch to retired professors who decide to maintain their webpages within the ETH web core area. The service provider shall include a reference to the professor's retired status on the relevant homepage.

6. General guidelines

6.1. Exclusion of liability

Corporate Communications cannot be held liable for any loss or damage caused, whether directly or indirectly, through the operation or loss of any service or the operation or failure of computers.

6.2. General terms and conditions

If any anomalies are identified and, in particular, if there is reason to suspect hacker attacks (whether passive or active) or activities other than those stipulated in the relevant application, IT Services shall have the right, at any time without prior notice, to take the server down or offline, or disable the server, or take any other measure that may be required for the purpose of securing the ETH network and the reputation of ETH Zurich. Service recipients are also specifically responsible for ensuring that applications are secure (e.g. preventing SQL injection attacks).

If any application generates unanticipated load that impacts other systems, the service provider reserves the right to remove the application from the cluster without prior warning. Another solution must then be found.

6.3. Acceptable Use Policy for Telematics Resources (“BOT”)

https://rechtssammlung.sp.ethz.ch/Dokumente/203.21en.pdf