

Horizon 2020 Program (2014-2020) Cybersecurity, Trustworthy ICT Research & Innovation Actions Security-by-design for end-to-end security Establishing and operating a pilot for a Cybersecurity Competence Network to develop and implement a common Cybersecurity Research & Innovation Roadmap

H2020-SU-ICT-03-2018



Cyber security cOmpeteNCe fOr Research anD InnovAtion

D5.1: Website and Social Media presences[†]

Abstract: This document discusses the website of the CONCORDIA project. We focus on its different content sections, the integration of social networking features, and the content update mechanism. Then we provide a short overview of the platform and methods used for its development. Finally, we conclude with the social media presence of the project and some statistics for each one of them.

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The CONCORDIA Consortium

Document Revisions & Quality Assurance

Internal Reviewers

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1 Introduction

This document details the CONCORDIA website which is one of the objectives of WP5 of the project. The CONCORDIA website is publicly available at http://www.concordia-h2020.eu. The website will be the main channel through which the general public will gain access to CONCORDIA results, publications, news and new tools developed in the context of this project. It will fulfil three different roles:

- It will deliver the general information about the project: participants, objectives, status reports and acknowledge EC contribution.
- It will deliver end-user-oriented output in a friendly, helpful and effective way. The website, along with various means of spreading information on the web, will be the main channel through which the general public will gain access to CONCORDIA results.
- Finally, the website will be a complete repository of all the information the project has delivered (e.g., software, public deliverables and demonstrators).

For better dissemination of the information, we took advantage of social media such as LinkedIn, Twitter and Facebook, as a way to aggregate and reach out to our constituency.

1.1 Document Outline

In the following Chapters, we will describe the CONCORDIA website as it was at the time of delivery of this document. In Chapter 2, we initially present the content and features of the CONCORDIA website and then in Chapter 3, we describe how the website can be updated using a web browser. In Chapter 4, we present the hardware and network infrastructure we use to run the site. In the next chapter (Chapter 5), we describe our presence on social media and some statistics about them. Finally, in Chapter 6 we summarize and conclude the document.

2 Website Layout

In this section, we will briefly present the current layout of the CONCORDIA website. At this point of time, the main goal of the website is to provide information on the project and its objectives, and to enable interested parties to get in touch with the project. Of course, the website will be a work-in-progress throughout the duration of the project.

2.1 Home Section

The primary goal of the Home section is to provide a quick overview of the CONCORDIA project. We can see that Home section (Figure 1) uses a modern layout with a top-level menu. The menu is used to provide the overview of the project website.



Figure 1 Homepage

In the first page we have included only a single button, the Objectives button, so that the user can easily navigate to the Objectives of the project and see what the project is about. Currently, and for the time period between 26-28th of February 2019, we have included a second "Press Release" button. This was to maximize the dissemination impact of CONCORDIA's press release and the EC press release that announced the CONCORDIA and the 3 other peer Cybersecurity Competence Networks.

2.2 Consortium Section

A short profile for each project partners is provided through the Consortium section (Figure 2) of the website. All the official partners' logos have been included in this page for the visitor to have a clear view of the CONCORDIA consortium.



Figure 2 Consortium Section

2.3 Downloads Section

The *Downloads* section is intended to make available to the public the documents published by CONCORDIA. As the list of published documents will expand both in length (i.e. more conference papers) and in diversity (i.e. inclusion of deliverables), it is expected that more pages will soon be added to this section. The title of each paper will be added to the page, as soon as, its acceptance notification is received. The full text of the paper or a link to the paper on the publisher website is added at the same time, or shortly after. From the Downloads menu the visitor can navigate to three more web pages. The Deliverables, the Publications and the Dissemination Material pages, which will be populated with content as the project progresses.

The right part of the layout in the internal pages of the website is used to show the latest CONCORDIA news. The displayed news are obtained in real-time from the CONCORDIA Twitter feed.

Figure 3 Downloads Section

The Deliverables page has been filled in with all the deliverables that will have to be compiled by the CONCORDIA consortium. There are 36 deliverables in total as someone can see in the respective page <u>https://www.concordia-h2020.eu/deliverables/</u> and in Figure 4 below. When a deliverable is ready and submitted to the EC it will be also included under this page. This is the case for the public deliverables. We also include the Confidential deliverables for completeness.

Home Consortium Downloads Workshops Events

h2020.

News

concordia-h2020.eu



Deliverables

The following table presents the list of CONCORDIA deliverables.

				🔁 concordia-h2020.eu Retweeted
				enisa ENISA 🥥 1h
Deliverable No.	Deliverable Name	Туре	Dissemination level	Today #STOA representatives @EvaKaili, STOA Chair and
D1.1	1st year report on designing and developing an ESRTE (M12)	Report	Public	@PaulRuebig visit #ENISA to discus ongoing #cybersecurity projects an upcoming challenges for the EU in
D1.2	2nd year report on designing and developing an ESRTE (M24)	Report	Public	the area of network and information security #ENISA15
D1.3	3rd year report on designing and developing an ESRTE (M36)	Report	Public	 t a t a t a t a t a t a t a t a t a t a
D1.4	Final report on designing and developing an ESRTE (M48)	Report	Public	Airb: Airbus CyberSecurity sh
D2.1	1st year report on the development of all pilots (M12)	Report + Demonstration	Confidential	@AirbusCyber will be represented i the Management Board of
D2.2	2nd year report on prototypes of all pilots (M24)	Report + Demonstration	Confidential	@concordiah2020, a #cybersecurity Competence Network with leading #research, technology, industrial
D2.3	3rd year report on prototypes and marketable solutions (M36)	Report + Demonstration	Confidential	and public competences to build th European Secure, Resilient and Trusted Ecosystem: https://t.co
D2.4	Final report on results and outcomes of all pilots (M48)	Report + Demonstration	Confidential	/HIMjZHlHBG
D3.1	1st year report on community building and sustainability (M12)	Report	Public	conc concordia-h2020.eu sh
D3.2	2nd year report on community building and sustainability (M24)	Report	Public	Women in #cybersecurity. One of th tasks of the @concordiah2020. https://t.co/G22J4qQhK1
D3.3	3rd year report on community building and sustainability (M36)	Report	Public	← 1213 ♥ 4 Twitter
D3.4	Final report on community building and sustainability (M48)	Report	Public	 concordia-h2020.eu Retweeted eunit eunity 20h
D3.5	Threat Intelligence Platform (M48)	Report + Demonstration	Public	The @eunity_project welcomes the four pilot #CyberSecurity Competence Networks and hope
D3.6	DDoS Clearing House Platform (M48)	Report + Demonstration	Public	that our activities will be further leveraged to ensure a strong
D4.1	Year 1 report on cybersecurity threats, and legal and economic aspects(M12)	Report	Public	collaboration with Japan on cybersecurity. @concordiah2020 @sparta_eu @ECHOcybersec
D4.2	Year 2 report on cybersecurity threats, and legal and	Report	Public	@CyberSec4Europe @EU_H2020 #H2020

Figure 4 The Deliverables of the CONCORDIA project

2.4 Workshops Section

This section will provide information about all the workshops and trainings that will be organized by CONCORDIA. It is expected that the visitors will be also able to see there photo galleries related to these workshops.

2.5 Events Section

This section will provide information about all public events and meetings organized by CONCORDIA. It is expected that the visitor will be also able to see there photo galleries related to these events.

2.6 News Section

This section will provide public information about all announcements related to CONCORDIA where consortium partners are involved. This kind of information is usually also communicated via the social communication channels of the project but we want this information to exist in the website as well. We are planning to develop another page in the website (named either "Publicity" or "CONCORDIA in the News") where we will include information with references to CONCORDIA (e.g in Internet blogs, newspapers, radio, TV or other media).

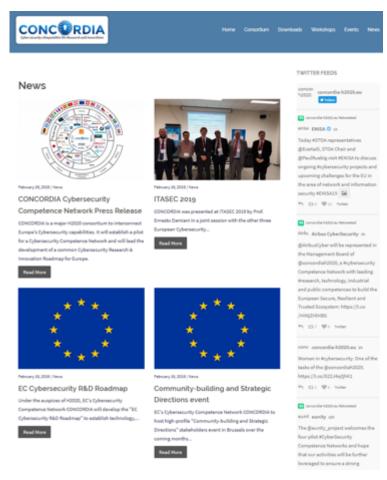


Figure 5 News Section

3 Updating the website

The contents of the CONCORDIA website can be easily updated using a web browser. This feature is provided by the CMS we use (see Section 4.1). After successful authentication, the website editor is presented with the *Website Administration Panel* shown in Figure 6. Through this panel all of the website's modules, settings and pages can be configured.

Dushboard	WordPress 5.1 is available! Please update nos-				Ogitions *	
≠ Posts III News	Pages Add New					
1] Media	All (51) Mine (5) Published (58) Drafts (2) Private (1) Trash (2) Cornerstone content: (0)					Search
Pages	Bulk Actions V Apply All dates V All SEO Scores V All Readability Scores V Filter			58 items 🔟 -	1	of 3
	Trie	Author		Date	2	Ð
Add New	Consortium Elementor	anthimpa	-	Published 2018/10/05		۰
Comments		anthimpa	-	Published 2010/10/31		٠
Utherness	Arthur's Legal B.X. — Dementor	anthimpa	-	Published 2018/10/31	٥	۰
P Appearance	Atos Spain S.A.— Dementor	anthimpa	-	Published 2018/10/31		۰
🖉 Plugins 📵 📥 Users	Ben-Garion University Elementor	anthimpa	-	Published 2018/10/31		۰
≁ Tools El Settings	Bitdefender Benentor	anthimpa	-	Published 2018/10/31		٠
₩ Twitter Feeds		anthimpa	-	Published 2018/30/33		۰
(2) SEO 🚺 🛄 Elementor	Cakallank – Elementor	anthimpa	-	Published 2018/10/31		۰
C Uttimate Social Media Icona	Cyber Detect Elementor	anthimpa	-	Published 2018/10/31		۰
🕸 Smart Sider	Cyprus University of Technology — Bementer	anthinga	-	Published		

Figure 6 Site administration panel. Highlighted is the section of the CMS module, which is used to edit content.

The pages of the site are updated through the *Pages CMS module*, which appears highlighted. Following the Pages link, all pages are displayed in the panel.

While it is possible to edit the contents of a page through the admin interface we presented, it is usually more convenient to update it through the front-end editor of the Wordpress-CMS. The front-end editor feature is automatically enabled when visiting the website, after having logged in the administrative interface. When it is enabled, a toolbar appears on the top of the page, which enables the user to go into edit mode (Figure 7).

Γ	🛞 🕫 CONCORDA. 🖌 Customize: 🔿 9 🕸 0 🕂 New 🖉 Edit Page: Smart Silder: 🕄 🔍 🛄 Edit with Elementor							Howdy, Admin Concordia 🔲 🔍
L				nsortium Downloads	Workshops	Events	News	(f 😏 📾
		Home	Consortium					

Figure 7 The front-editor options of the CMS

The actual content of the page is encapsulated in Elements. These Elements produce HTML output, which is placed in designated locations in the template. There are plenty of Elements to be used when designing/updating a webpage as can be seen in Figure 8.

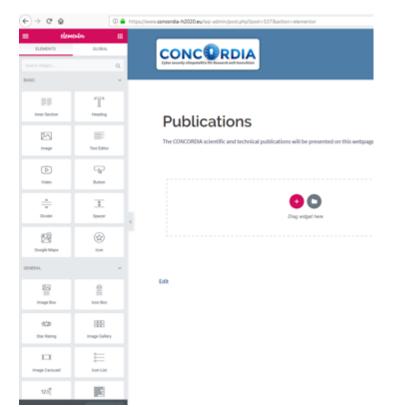


Figure 8 The Elementor editor and the ready to use Elements for compiling/updating a webpage

Obviously, the most commonly used plugin is the *Inner Section Element*, which is used to create sections in a webpage then edit and then display html formatted text. However more specialized plugins exist for interfacing with specific data sources (e.g. Google maps).

The built-in editor used for editing the page text offers many of the formatting options found in a full-blown word processor.

From its day-to-day use, we have found the website update mechanism very convenient and easy to use. Currently, the content of the website is updated by FORTH. If the need arises, it would be straightforward for other partners to be involved in adding and updating website content with only minimal training (if any at all).

4 Website hosting

4.1 Software stack

For serving the CONCORDIA website we use the following *software stack*:

- Linux as the operating system
- Apache as the web server
- MySQL as the database backend
- WordPress-CMS for managing the content.

Wordpress itself is a generic CMS that allows accessing objects stored in a relational database (in our case *MySQL*) and it is easy to be used while creating, updating and maintaining the webpages of a website. We should mention that all the software components are regularly updated in order to be immune to known (and patched) security vulnerabilities. All the components of the stack are running in the same VM instance.

4.2 Hardware and hosting

The CONCORDIA website is hosted by FORTH on their premises in Heraklion. The hosting server features two Intel Xeon six-core CPUs running at 2.4GHz and a total memory of 32GB. It is connected to the Internet through FORTH's 10Gigabit connection to the GRNET backbone. The server has two high performance SAS disks arranged as RAID-1 for fault-tolerance. The server is protected by firewalls in order to minimize the risk from cyber-threats.

It is also important that the hosts reside in a protected physical environment. They are located in one of FORTH's data-centers. For ensuring optimal operating environment, it is fitted with industrial-strength air conditioning with more than 240.000BTUs efficiency. In power emergencies, it is supported by a UPS power supply and an external power generator which is engaged automatically on power failure. Additionally, the data-center features an automatic carbon dioxide fire-extinguishing system.

5 Social Networks

Currently, CONCORDIA's presence is established in Twitter and LinkedIn. We also operate and maintain a Facebook account.

5.1 Twitter presence

The Twitter profile of CONCORDIA¹ can be seen on Figure 9. It has been also integrated to the website in the form of the *news feed* in the right part of the layout of the internal pages of the website.



Figure 9 Twitter profile of CONCORDIA

At the time of this writing, we have posted 51 tweets/retweets through Twitter and the account has 175 followers.

During January 2019 the 6 CONCORDIA tweets gained 3303 impressions, 30 mentions and the CONCORDIA profile was visited 349 times.

During February 2019 the 12 CONCORDIA tweets gained 12100 impressions, 59 mentions and the CONCORDIA profile was visited 359 times.

¹ Our Twitter profile can be accessed on <u>https://twitter.com/concordiah2020</u>

5.2 LinkedIn presence

The LinkedIn profile of CONCORDIA² can be seen on Figure 10. Link to the LinkedIn profile has been integrated in the website's template, thus making it clearly visible to all the pages of the website.

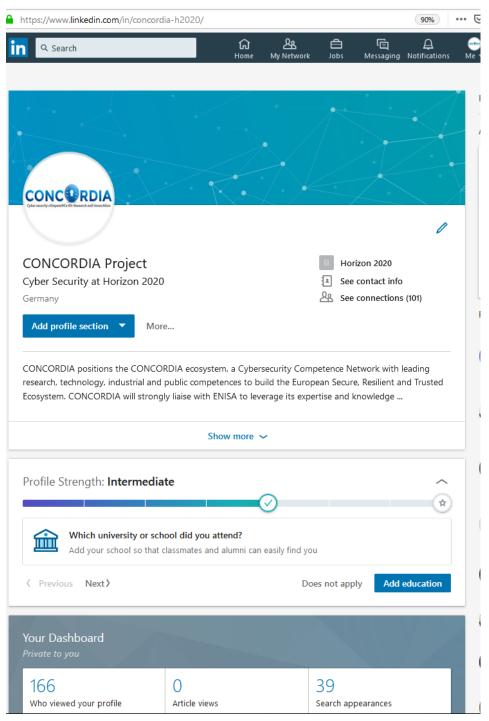


Figure 10 LinkedIn Profile of CONCORDIA

² Our LinkedIn profile can be accessed on <u>https://www.linkedin.com/in/concordia-h2020/</u>

The LinkedIn profile has been "connected" with the Twitter profile of CONCORDIA. This way someone can post something in LinkedIn and there is the option to automatically tweet the same post in the Twitter profile. This feature is quite useful when posting short text messages less than 255 characters. At the time of this writing the CONCORDIA LinkedIn profile has 169 visits and 101 connected profile accounts.

5.3 Facebook presence

The Facebook profile of CONCORDIA³ can be seen on Figure 11. Link to the Facebook profile has been integrated in the website's template, thus making it clearly visible to all the pages of the website.

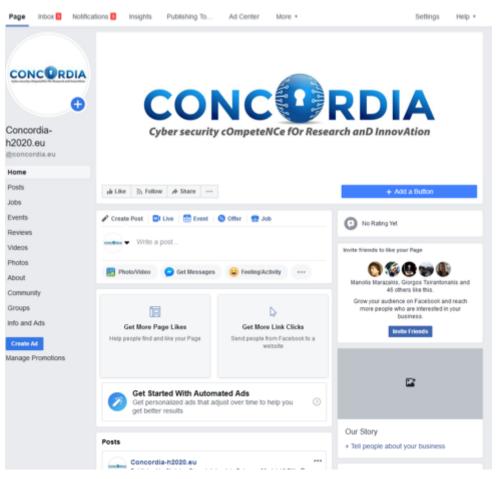


Figure 11 Facebook Profile of CONCORDIA

Some statistics for the Facebook account of CONCORDIA are the following. Since 1/1/2019, the profile has gained 191 likes and 2715 unique users were reached through the Facebook activity.

³ Our LinkedIn profile can be accessed on <u>https://www.facebook.com/concordia.eu/</u>

6 Conclusions

In this document, we discussed the CONCORDIA website. We provided a description of its sections and content and outlined the social networking features we have integrated. Moreover, we showed the process of updating the website through a user-friendly front-end editor. Additionally, we provided an overview of the components and the methodology we used to build the website. We also detailed its software and hardware-hosting environment.

Closing, we should cite that at the time of writing of this document the CONCORDIA website was already capable to provide the functionality requirements that had been laid out in the project's description. However, in addition to the existing commitment to keep the website running and up to date, the consortium will continue looking throughout the course of the project for features that could be integrated with it in order to provide an enhanced experience to the visitors.