CSI-COP
Citizen Scientists Investigating Cookies and App GDPR compliance

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Deliverable D1.6 [D5]

CSI-COP Societal Impact 1

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Acknowledgements

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CSI-COP's first societal impact report presents the initial impact on society that the project has had. This is with respect to the project's objectives including assisting the EU with monitoring the compliance of the general data protection regulation (GDPR) in websites and in apps. The approach has applied a citizen science methodology based on the ten principles of citizen science inclusion formulated by the European Citizen Science Association (ECSA). CSI-COP's societal impact aims to raise awareness of different types of digital tracking techniques deployed in websites and apps, and the need for improving transparency around 'informed consent'. The societal impact includes addressing the project's thirteen indicators to monitor and evaluate impact: ten from the European Commission's Monitoring the Evolution and Benefits of Responsible Research and Innovation (MoRRI), and three from the United Nation's sustainable development goals (UN SDG). These indicators encompass gender equality; science literacy and quality education; ethics; public engagement; open access, and partnerships for goals.

Undoubtedly a once-in-a-hundred year's pandemic (COVID-19) virus has hit the project hard with respect to engaging the general pubic through in-person activities. Additionally, the nature of CSI-COP's consortium changed with the termination of one project partner in the second year of the project. Nonetheless the CSI-COP partners' efforts have realised a **free informal education** course '**Your Right to Privacy Online**' which has already begun delivery across the partner countries in local languages, as well as through online synchronous workshops (attendees present at the same time). This course has reached hundreds through different media: the EU.Citizen-Science MOOC platform for self-study, through course document download from the CSI-COP website, and in online and in-person workshops. To reach a wider audience the course has been translated into eleven languages from the English original: Catalan, Czech, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Romanian, and in Spanish.

The face-to-face course has been delivered by CSI-COP partners in the UK, Greece, Israel and in Hungary. Forthcoming workshops will continue in these countries with others taking place in the Czech Republic, in Finland and in Romania. As reported in CSI-COP's first deliverable (Ignat et al., 2020), citizen science projects have featured mainly white middle-aged males. The active practice of inclusion in the CSI-COP project has so far seen an approximate 2:1 ratio between female|male attendees, and young people attracted to the course through partner university connections. Additionally, the first societal impact has seen partners evaluating their own online behaviour to improve their data-privacy management. Colleagues in the consortium have also begun investigating websites and apps for tracking cookies to prepare demonstrations for citizen scientists. CSI-COP partners have also begun holding conversations with a variety of stakeholders, including data protection officers, local businesses, neighbours, friends, and sister EU funded citizen science projects. This work is continuing to an extended CSI-COP project-end in June 2023 following an Amendment to CSI-COP project.

The aim of the CSI-COP project is to leverage **citizen science** by engaging members of the adult public assisting with **monitoring compliance** of the general data protection regulation (GDPR). This is specifically with respect to **transparency** and **informed consent** about what tracking cookies or other online surveillance technologies might be **embedded in websites and apps**. We know that online tracking is ubiquitous. In his 10 April 2022 show 'Last Week Tonight', UK comedian John Oliver exposed the role of *data brokers* (HBO series 9 episode 7, 2022). Oliver divulged the AdTech industry's practice of collecting personal data online then selling it on. The UK Guardian newspaper reported the gist of Oliver's expose in an article on 11 April 2022:

> "…discussed the 'unsettling moments' that often happen throughout the day online, as we discover that companies are 'monitoring our activities a little bit closer than we would like'. .. called attention to data brokers, who are part of a multibillion-dollar industry that encompasses 'everyone from credit reporting companies to these weird people-finding websites whenever you Google' … [data brokers] collect your personal information and then resell or share it with others … the 'middlemen of surveillance capitalism' ... sprawling, unregulated ecosystem… looking into what they [data brokers] do and how they do it can get *very creepy, very fast*". (Guardian, 2022).

This is why it is very important for projects such as CSI-COP to make people realise there are ways to protect ourselves in a digital environment that can de-anonymise us as living individuals from the electronic crumbs we drop around the Internet. This is as we visit websites and use apps so giving advertisers who have used data brokers a hold on our time and attention to sell us things, or make us change our behaviour.

Citizen science engagement in the CSI-COP project is first established through raising awareness of the project and gaining interest among the general public to learn about the extent of online tracking. CSI-COP project has thirteen indicators to monitor and evaluate impact: ten from the European Commission's Monitoring the Evolution and Benefits of Responsible Research and Innovation' (**MoRRI**), and three from the United Nation's sustainable development goals (**UN SDG**). The impact measures include:

➢ gender equality: inclusive approach to involve females and males as citizen scientists in the project

➢ science literacy: increase this by raising awareness of capabilities of internet technologies (website design; app development)

➢ quality education: delivery high-quality informal education from the latest research in data protection in online privacy

➢ ethics: ensure CSI-COP project is conducted in a responsible and ethical way through ethics application by the coordinating partner (Coventry University)

➢ public engagement: activities aimed at the general public

- open access: ensure project deliverable reports are available by uploading to open access platforms – Zenodo, as well as CSI-COP project website

- partnerships for goals: collaborating with sister science projects in their events.

To maximise societal impact, CSI-COP consortium partners leveraged a variety of engagement methods. This has included:

- Word-of-mouth to neighbours, family and friends;

- Distributing CSI-COP project newsletters to consortium partner networks;

- Utilising partner university marketing teams;

- Posting messages on social media platforms (LinkedIn, Reddit; Twitter);

- Dissemination during partner invited talks to external organisations;

- Teaching students in relevant taught courses (students appear less involved in citizen science projects, as found in Hinsenkamp et al., 2020).

To review early societal impact from the activities of CSI-COP's consortium, a short survey was distributed by the coordinating partner Coventry University to each partner. The questions aimed to elicit i) any personal behaviour change in the CSI-COP team members, ii) whether any institutional changes had been instantiated by a CSI-COP partner and iii) whether any impact beyond the partner organisation had been achieved. The Appendices detail CSI-COP partners responses to these survey questions:

1. What impact has being on the CSI-COP project had on partner team members?
2. Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?
3. Do team members ever check privacy policies of websites:
    a. If yes, please give an example of a website privacy policy that you read – please provide screenshot with name of website the privacy policy is for
    b. If no, what prevents you from checking privacy policies
4. Do team members use apps? If so:
    a. Do you download and use?
    b. Have you checked permissions in the apps?
5. Have the CSI-COP partner analysed their own organisation's website for cookie policy?
    a. If so, what was the result of the analysis (for example, if you used a tool to analyse, or conducted an analysis without a tool), please provide screenshots for evidence
6. Have you been in touch with your organisation to make any changes in your organisation's website, if your analysis showed improvements could be made to make it more GDPR-compliant? Please provide screenshots for evidence.

7. Have you been in touch with other organisations about their websites with respect to improving GDPR-compliant? Please provide evidence, such as names of organisations and dates of contact
8. Wider society impact.

In the next section of this report, some of the early societal impacts of the CSI-COP project are highlighted from the partners' responses to the above questions. Further details are in the Appendices.

Early CSI-COP Impact

An ongoing activity from CSI-COP's tasks has already generated evaluation of many websites for transparency about any embedded trackers in cookie notices and privacy policies. This produced CSI-COP's first policy recommendation to the EU: to enforce minimal tracking in projects funded from EU grants (Shah, 2021). The early findings, for example, from evaluating the coordinating partner's organisational website (Coventry University), has led to conversations with its Data Protection Officer to review GDPR compliance across the university's group of websites, including its virtual learning platform Aula Education (see Appendix 1).

Another societal impact from CSI-COP has been public engagement across Europe by the consortium partners. This has been achieved by continually disseminating the purpose of the project through a variety of media. To foster interest in the project, CSI-COP created a **free informal education course** which provides **experiential learning**. The informal education designed in the project's second year, in early Spring 2021, is offered through CSI-COP's free course: '**Your Right to Privacy Online'** **(YRPO).** This course was developed by CSI-COP Coordinator, Coventry University, an expert in designing massive open online courses (MOOC), and its sub-contractor, **Privacy Matters**. The course was then tested by some members of the public and evaluated by the EU-Citizen.Science team at UCL to ensure quality of content.

Due to the effects of COVID-19 related country lockdowns affecting public engagement in the CSI-COP project (Meunier, 2020), the 'Your Right to Privacy Online' course was first made available as a MOOC to allow interested individuals to complete in their own time. CSI-COP's MOOC was made accessible in English from the EU funded **EU-Citizen.Science** project platform: https://moodle.eu-citizen.science/ . The course document in English was also made available from CSI-COP project website's **informal education web page** (https://csi-cop.eu/informal-education-mooc/). At the time of this report, the course document is available in twelve languages from the CSI-COP project website through recent translations (Catalan, Czech, English, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Romanian, and in Spanish).

Communication, dissemination and exploitation activities by the CSI-COP partners has raised interest in members of the public (males and females, students and non-students) to learn about and begin completing the YRPO course in their own time. Members of the public gain the experiential learning in one-to-one training sessions where the opportunity to apply the knowledge from the 'Your right to privacy online' course is demonstrated. The practical skills offered in this free training afford individuals the expertise to explore beneath websites and apps to uncover digital tracking and record findings about transparency and informed consent. This investigation is recorded in CSI-COP's bespoke cookies recording tool. The results of CSI-COP citizen scientists' cookie and online tracking investigations will be the production of an online, searchable freely available repository of online trackers.

Since COVID-19 restrictions have been lifted across the CSI-COP partner countries, the free course is being delivered in face-to-face workshops as well as in online workshops, and as hybrid sessions. Accessible venues have been utilised for the face-to-face workshops. For example, the Coordinator, Coventry University has organised workshops in public libraries and in an independent café to reach the general public. This activity is continuing at the time of this report. Following an Amendment to CSI-COP grant agreement and one partner termination, two partners (NaTE; IB) agreed to take on extra

effort to replace delivery of two CSI-COP free workshops originally tasked for the terminated partner. At the time of this report, hundreds of individuals across the partner countries have registered to attend online 'YRPO' courses. Over 200 individuals have completed CSI-COP's course across seven of the available course languages. At the time of this report, over 160 individuals have completed an anonymous survey to answer the EU SwafS15-2019 call questions on *who citizen scientists are*. The societal impact from CSI-COP has seen the following number of 'YRPO' course completions defined by individuals submitting their test answers in response to the 'YRPO' multiple choice self-assessment test at the end of the course:

- English: 51 completions

- Greek: 76 completions

- Hungarian: 6 completions

- Hebrew: 9 completions

- Czech: 4 completions

- Romanian: 14 completions

- Spanish: 3 completions

Initial data on *who the citizen scientists are* show that CSI-COP has reached **almost twice as many females as males** (117:64), who have completed the YRPO course and completed the survey (though individuals two preferred not to say). The **age range of individuals** who have completed the course and the anonymous survey **tends to a balance** (85:95) **between young adults** (18-39) **and older adults** (40+), with three individuals so far preferring not to reveal their age-range. However, the anonymous survey does show an imbalance between urban and rural residents who completed the course and the survey: 165 urban residents: 13 rural area residents. Five people did not answer this question. The definition of urban and rural was detailed in CSI-COP's D2.2 deliverable (Hinsenkamp, et al., 2020). This information will be presented fully on completion of 'YRPO' courses for CSI-COP's work package 4 deliverable report D4.3 by partner NaTE. However, the figures do show how CSI-COP partners have impacted society through proactive inclusivity efforts so far, to create a diverse community of males and females of all ages interested to learn how to protect their data-privacy online.

CSI-COP's informal education and practical training activity is continuing with the aim to reach many more learners and to persuade those who show interest to follow through and complete the course for their benefit. CSI-COP has found that the number of actual attendees in the scheduled workshops is much lower than the number who register to attend. The reasons cited by non-attendees and course completers are unsurprising. Non-attendance following registering interest to attend CSI-COP's 'YRPO' includes the date and time of the workshop conflicting with something urgent and unexpected. One learner who completed the course but could not join CSI-COP as a citizen scientist gave COVID-19 affecting availability-to-volunteer (see Box 1).

> Thank you for the newsletter, it was good to read and have an overview of the year 2 meeting, workshops and the parent's story. For myself, the reason I did not join as a citizen scientist was due to lack of time. Staffing and covid has made things tricky and have been doing 2 roles so unable to take more on.

Box 1: Response from individual who completed the English language CSI-COP 'Your Right to Privacy Online' course

Members of the public who have attended CSI-COP's 'YRPO' course online, or in-person have given high praise. Following Coventry University's hybrid workshop delivered in Coventry city Library on 12 April 2022, one attendee, a female university lecturer promised to help market the course to her students (Box 2).

> Thank you for the course yesterday. The teaching material is excellent and the delivery is perfect. I wish more people could attend and I will market the course for you.
> I invite you to deliver the course to my school, EFA (School of Economics, Finance and Accounting) and I will ask all course directors to market the course for you."
> The students will receive their provisional marks on 23 May. I suggest that we hold the event between 9 May and 23 May.
> I will contact my course reps next week for a date, then let you know".

Box 2: Feedback from one attendee in YRPO 12 April 2022 hybrid course

This is encouraging, since CSI-COP's proposal included "**Other Impact 3: Upskilling the Public and Educators**"

The Appendices present CSI-COP partners' responses which evidence behaviour change in the partners themselves, and inspiring change in their network: family, friends, colleagues, students, professional and consumer organisations. The societal impact has included deleting WhatsApp messenger app from a personal smart phone, to downloading a privacy browser: Brave. WhatsApp is owned by Facebook who were at the centre of the Cambridge Analytica scandal. Millions of Facebook users had their data extracted and misused by Cambridge Analytica (Wylie, 2019).

Additionally, CSI-COP team members now try to put convenience aside since the start of the CSI-COP project to apply time finding options in websites to reject cookies. This extends to setting only necessary permissions in apps to enable the app to work. Table 1 presents a sample of partner responses to the internal survey. Full answers are found in the Appendices to this report.

Internal CSI-COP survey	**CSI-COP partner response**
Do team members ever check privacy policies of websites	Not before CSI-COP project. Just did not consider the need as an unspoken assumption was that websites would respect website visitor privacy." (Appendix 1)
Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?	It used to be the case that for the sake of time and convenience, we all used to consent to whatever cookie banner flashed at the beginning of web browsing. Things have changed after we realised the extend of digital tracking and how our personal data come in the possession of third (concerned) parties, thanks to CSI COP project" (Appendix 2).
What impact has being on the CSI-COP project had on partner team members?	In spite of the fact that none of the members of NaTE's team is an expert in the field of online privacy and data protection, since the beginning of the CSI-COP project there has been considerable improvement in our awareness of the importance of data protection issues and in the way we handle cookies during our daily Internet and apps usage. This is due to the knowledge we gained from the research findings unearthed in the research phase of the CSI-COP project, from relevant information shared among project partners in the regular progress meetings and from reading and translating the CSI-COP MOOC content (Appendix 3).
Do team members use apps?	Apps are used for both work and free time. In any case, the set of apps is kept to the minimum required and privacy policies are checked before installation. Some apps are required, like Microsoft Authenticator, or highly useful, for example Microsoft Teams, Webex Meet and GoToMeeting (Appendix 4).
Have you been in touch with your organisation to make any changes in your organisation's website	We have approached the BIU website manager and asked for a meeting to discuss cookies usage in BIU site" (Appendix 5).

Table 1: Sample of partner responses to CSI-COP internal survey

Outside of the CSI-COP consortium team members, Boxes 3 and 4 show a sample of behaviour change from individuals inside lead partner Coventry University, though unconnected with the CSI-COP project, and an external individual, part of CSI-COP's network.

[**Name redacted: CU staff**] 31/03/21
Hi Huma
Yes I would, it definitely made me more aware as I mentioned at the end of the talk. 😊
Thanks
[Name redacted for data-privacy]

Good afternoon [**Name redacted for data-privacy**],
I know you were really busy facilitating the 'You and Your Data' session on Saturday, but would you say, that following what you heard, you would now check your mobile 'phone for app permissions in settings?
Huma

Box 3: CU Internal staff correspondence with Huma Shah

The comments in boxes 3 and 4 show that online privacy in apps and websites is now on the radar of these individuals, and in one case, they are passing on the awareness to others.

[**Name redacted for data-privacy**] 30/03/21
Hi Huma

Thank you very much for letting me have this.

It has been really interesting and useful to discuss online privacy issues with you and I am now very careful to manage cookies and refuse them where possible. I'm also alerting friends to this.

Box 4: Network of CU external individual correspondence with Huma Shah

Societal Impact: Sister SwafS Projects

CSI-COP has begun analysing EU funded 'sister SwafS' project websites. At the time of this deliverable sister SwafS project CS-Track (CST, n.d.) had been contacted in January 2021. This was to raise awareness of first party cookie, and twenty-seven third party requests from nine unique hosts that were not made immediately transparent in CS Track's privacy and cookie policy at that time. CS Track website has a cookie banner at the bottom of its pages (Screenshot 1) which states:

> "By clicking "Accept", you consent to the use of ALL the cookies. However, you may visit Cookie Settings to provide controlled consent." (CST, n.d.).
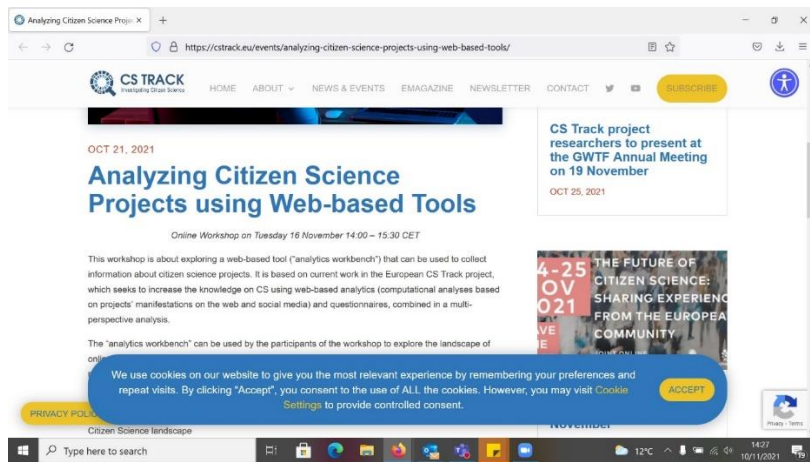
Screenshot 1 CS Track: https://cstrack.eu/

This work is continuing to raise awareness among other citizen science projects. The purpose is to advise about cookie banners and privacy policies to help their web and app developers make their communication, dissemination and other interactive tools more transparent and to better comply with the GDPR.

The termination of one CSI-COP partner offered the opportunity to reach beyond the planned workshops to host more, including online leveraging the 'YRPO' course. To increase CSI-COP impact, project awareness has been spread through a variety of communication and dissemination tools, including press notices from partner universities, to using social media platforms (LinkedIn; Reddit, Twitter, Yammer). Forthcoming activities include parent and teacher roundtables, to help parents understand the due diligence undertaken by schools and teachers in advocating digital learning platforms, or education apps. Other activities by the project partners will include stakeholder cafés bringing together web and app developers with local businesses, big tech and policymakers. At the time of this deliverable, in-person workshops are being organised in Athens, Coventry, Patras, Oulu, Tel Aviv, Prague, and in Cluj-Napoca. These tasks are ongoing with more online and in-person workshops planned in the Spring and Summer of 2022.

In the CSI-COP proposal, the consortium was fully aware of the obstacles to maximise impact, including "Low interest from general public". Yet despite unforeseen, *force majeure* international effects exacerbated by a new conflict in the Eastern region of Europe (Russia-Ukraine tragedy), economic consequences of national higher energy prices affecting household income, and the ongoing COVID-19 risk, CSI-COP partners are motivated to reach out as wide as possible to make the general public aware of the importance of protecting our data online, and to demonstrate **that privacy is not a privilege**.

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Appendix

Appendix 1: Partner 1 CU

What impact has being on the CSI-COP project had on partner team members?
Some members of Coventry University's team now use Brave browser "a free, open-sourced privacy-focused browser: https://brave.com/

Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?
Before the CSI-COP project, it was less about convenience, but lack of knowledge about what those cookie banners meant. To access information on websites visited, cookie banners and cookie notices were ignored to enter the websites.

Do team members ever check privacy policies of websites: if yes, please give an example of a website privacy policy that you read – please provide screenshot with name of website the privacy policy is for.
Not before CSI-COP project. Just did not consider the need as an unspoken assumption was that websites would respect website visitor privacy. However, at least one of the Coventry University does check privacy policies and passes on some for review to CSI-COP data protection, and privacy expert partner STELAR. One online privacy policy that CU requested STELAR to review was the **BBC** website – the UK's national broadcaster. The BBC's privacy policy is found here:
https://www.bbc.co.uk/usingthebbc/privacy/privacy-policy/
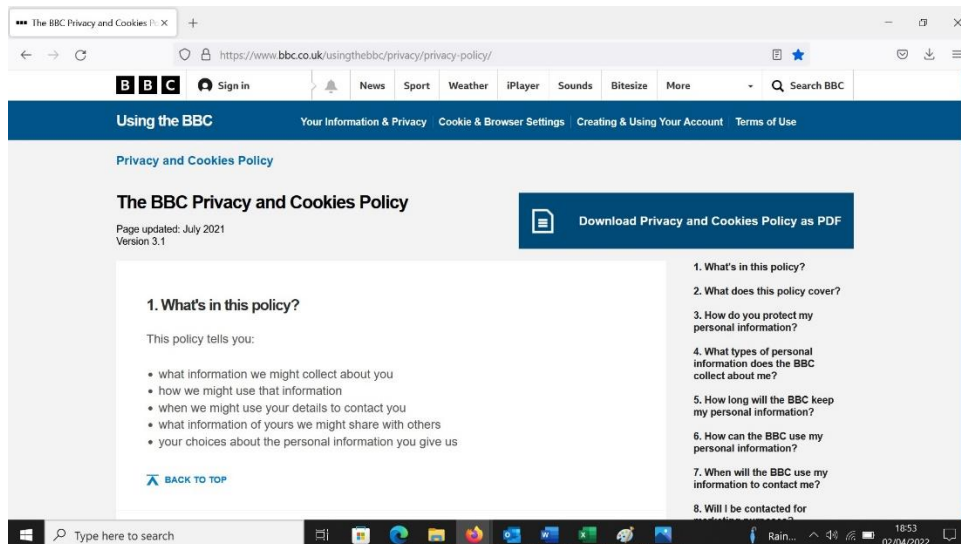
STELAR's analysis of BBC's privacy policy page (email to Huma Shah from Dimitrios Tsolovos: 21.03.22):

"The website uses a pop up to inform users on how their personal data may be used if they consent. The choice to refuse sharing personal data is clear and the user is given

the option to manage exactly which options they wish to consent to or not. Each of the choices comes with a small description of what their personal data will be used for so the user can make an informed consent. Once small note that I have with it however is that the "Legitimate interest" choice for each option is turned on by default instead of the opposite. The user even has an option to refuse only specific "vendors" from having access to their data while allowing others. Here too legitimate interest however is turned on by default".

Do team members use apps, if so have you checked permissions in the apps?
Yes. **Shazam** 'tune-finder' app: https://www.shazam.com/gb/home Since CSI-COP project, this app is only allowed those permissions to the smart phone on which is sits is access to microphone. This is to allow the app to pick up a tune and perform an algorithmic match to inform what that tune is and who the musician is.

Have the CSI-COP partner analysed their own organisation's website for cookie policy? If so, what was the result of the analysis (for example, if you used a tool to analyse, or conducted an analysis without a tool), please provide screenshots for evidence.
Yes, see the main report. In addition, an analysis has been done on Aula Education website: https://www.aula.education/ Aula Education is a virtual learning platform now owned by Coventry University for student engagement. Academics upload lecture and assessment material for students to access. Students can interact with academics by messaging them directly through the Aula. A screenshot of Aula is below – its 'cookie box' presented bottom left of the screen with the options of 'Learn more', 'Allow' or 'Decline'.
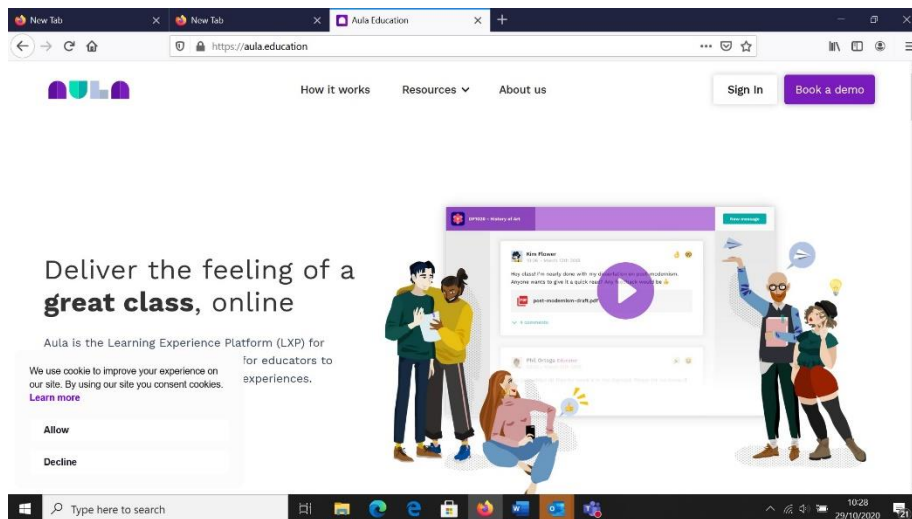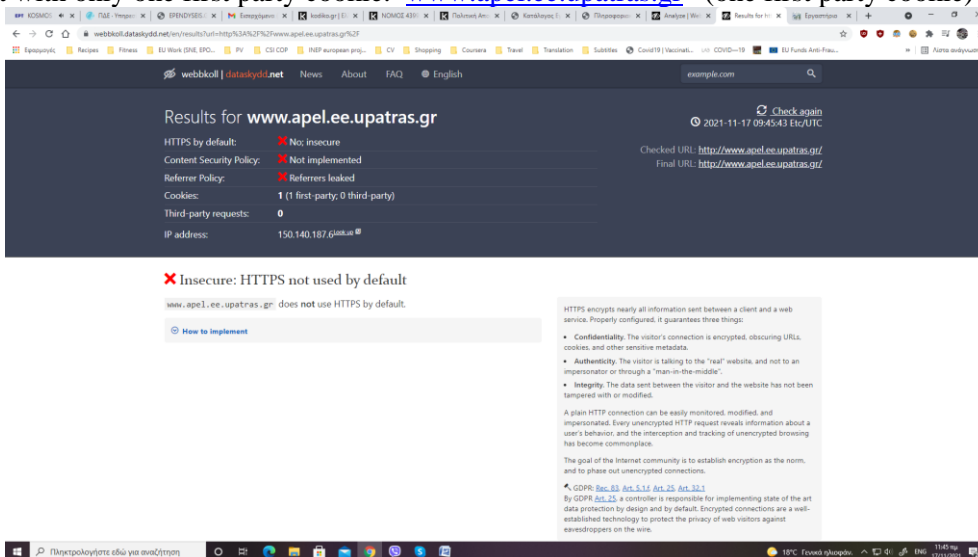

Have you been in touch with your organisation to make any changes in your organisation's website, if your analysis showed improvements could be made to make it more GDPR-compliant? Please provide screenshots for evidence.
Yes, with the university's Data Protection Officer (DPO). At the time of this report, Coventry University's DPO has been contacted about Aula Education's 'Privacy Policy' linking directly to a generic 'Website Privacy Notice' on Coventry University's website, shown in the screenshot below.
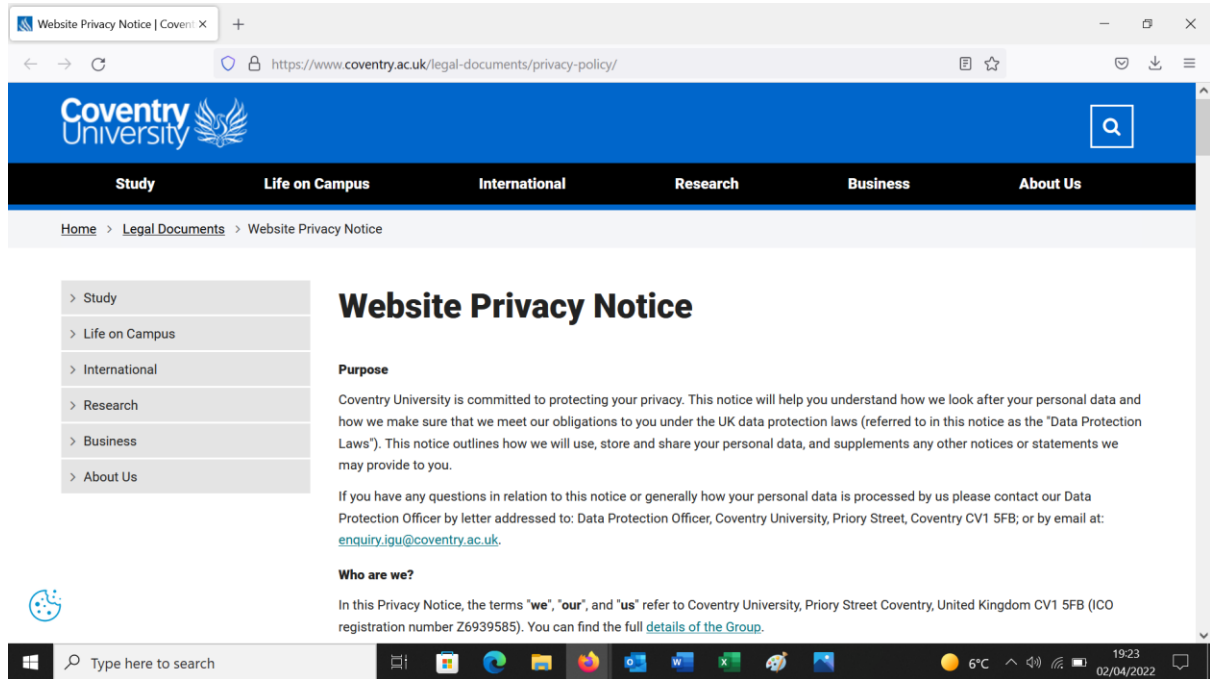
Frequent correspondence with Coventry University's Group Data Protection Officer is aimed at speeding up transparency and informed consent across Coventry University's group websites (Because that correspondence is deemed confidential it is not possible to post screenshots here).

Have you been in touch with other organisations about their websites with respect to improving GDPR-compliant? Please provide evidence, such as names of organisations and dates of contact.
Yes. External organisations, including EU funded projects with websites Cos4Cloud (https://cos4cloud-eosc.eu/), CS Track (https://cstrack.eu/),

Appendix 2: Partner 2 UPAT

What impact has being on the CSI-COP project had on partner team members?
CSI-COP project has certainly raised awareness between the members of UPAT's team, as far as the matter of digital tracking is concerned.

Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?
It used to be the case that for the sake of time and convenience, we all used to consent to whatever cookie banner flashed at the beginning of web browsing. Things have changed after we realised the extend of digital tracking and how our personal data come in the possession of third (concerned) parties, thanks to CSI COP project.

Do team members ever check privacy policies of websites? If yes, please give an example of a website privacy policy that you read – please provide screenshot with name of website the privacy policy is for
Although privacy policies are sometimes lengthy we did read our institution's one, so as to know how the personal data of users are being processed and if there is someone responsible you can talk or write to. Turns out there is a DPO available and UPAT provides all of the information necessary for the users of the site as far as the process of their data is concerned. All of this info is in the Greek language. In English, there are only two small sections.
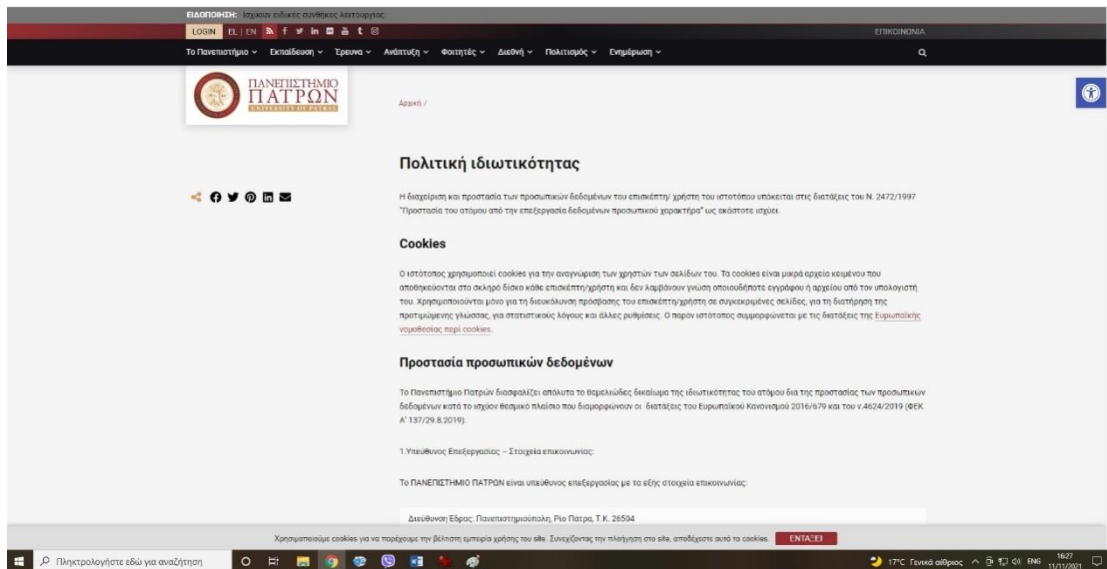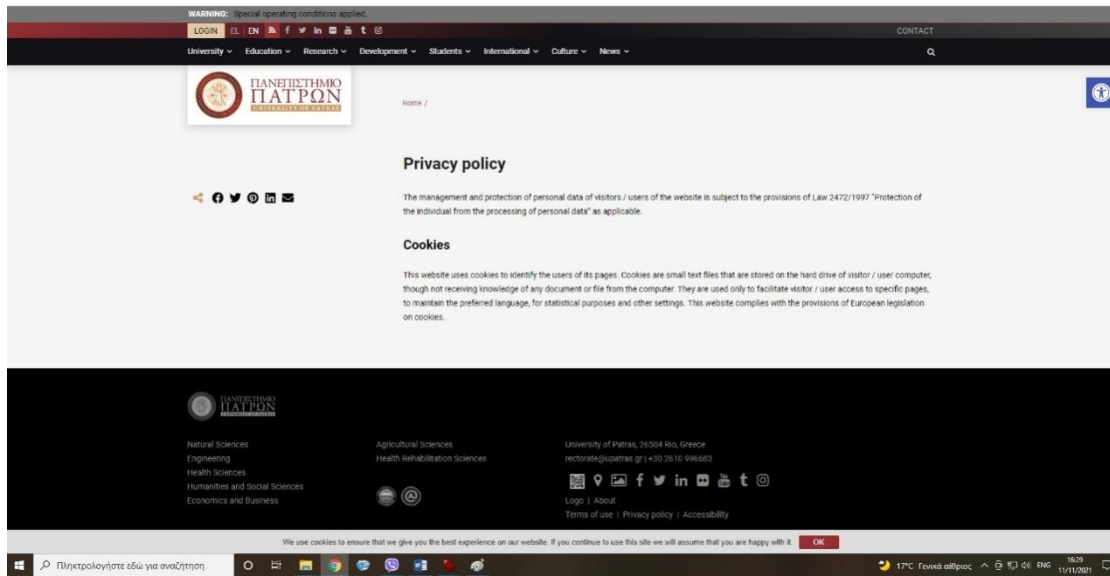
Do team members use apps, if so, do you download and use? Have you checked permissions in the apps?

Every member of the team is using apps after downloading them from Google Play or alternative sources (F-droid). After joining CSI COP project, we all checked permissions and disabled what we thought was unnecessary for some apps, such as access to sms, local storage, photo gallery etc.

Have the CSI-COP partner analysed their own organisation's website for cookie policy? If so, what was the result of the analysis (for example, if you used a tool to analyse, or conducted an analysis without a tool), please provide screenshots for evidence.

During the implementation of the project, we checked UPAT's web page for trackers, using Webkoll and PageXray [free online tools]. According to the results, there are no third-party cookies, but there are twelve (12) third party requests. There is a discreet banner at the bottom of the page stating: "We use cookies to ensure that we give you the best experience on our website. If you continue to use this site, we will assume that you are happy with it."

Have you been in touch with your organisation to make any changes in your organisation's website, if your analysis showed improvements could be made to make it more GDPR-compliant? Please provide screenshots for evidence.

We actually think that University of Patras does not have much room for improvement, as they do not use any third party cookies and explicitly describe who, how and for how long they are processing personal data or any other type of data acquired through the website. They also provide a form for the users that gives them the chance to fully exercise all of the rights GDPR is granting them. They even have links to the relevant legal framework.

We reached out to the team in charge of UPAT's data protection and had a meeting with them in order to acquaint with each other and inform them about our project and work. Also an existing site, belonging to our PI's lab (APEL UPAT), was about to get a "facelift". After our intervention, it was rebuilt with only one first party cookie. www.apel.ee.upatras.gr   (one first party cookie)

Have you been in touch with other organisations about their websites with respect to improving GDPR-compliant? Please provide evidence.

For the moment we have reached out (by telephone) to some organisations about their website's GDPR compliance and after our intervention two of the sites have no 3rd party cookies as you can see in the screenshots below.

www.interregcinovatec.eu

https://www.grapeviot.com/index.php

We have also been in contact with a third organisation and we are talking with them about their compliance with GDPR and we are waiting for their reply and actions.

https://www.orionas.gr/

What impact has your partnering in CSI-COP had on the wider society? For example word-of-mouth with neighbours, family, friends leading to completion of the informal education MOOC, or attendance interest in a forthcoming CSI-COP workshop based on the MOOC content).

Apart from following the dissemination and communication plan of the project, all members of the team try to raise awareness for GDPR compliance, starting with family, friends, neighbours co-workers and every other interested party. The results we have so far are:

- Sixteen (16) people have taken the MOOC
- Ninety-five (95) people have attended the workshops we have organised so far. One in Athens (November 2021), and 4 in Patras (December 2021, February 2022 and 2 in March 2022).

The feedback we got from all of our workshops is that people were not really aware of the extent of online tracking and they would always accept cookies for the sake of time. After attending CSI-COP workshops they stated they will be more precautious with their personal data and the acceptance of cookies, while surfing online. They also will be more careful about granting permissions to applications on their smartphone. Some of them expressed the desire to get more involved in the project.

Appendix 3: Partner 3 NaTE

What impact has being on the CSI-COP project had on partner team members?
In spite of the fact that none of the members of NaTE's team is an expert in the field of online privacy and data protection, since the beginning of the CSi-COP project there has been considerable improvement in our awareness of the importance of data protection issues and in the way we handle cookies during our daily Internet and apps usage. This is due to the knowledge we gained from the research findings unearthed in the research phase of the CSI-COP project, from relevant information shared among project partners in the regular progress meetings and from reading and translating the CSI-COP MOOC content.

By learning more and more about the purpose and content of CSI-COP, as well as the data protection options outlined by the project, we use the privacy options of our browsers (e.g. Firefox) more consciously. One of the NaTE colleagues reported that she gained information about her browser's privacy from the Cover your Tracks site, which evaluated the capabilities of third-party trackers and identified the best defense against them. (She found that the browser fingerprint she used 'appeared to be unique'.)

The same colleague also uses iOS. Apple frequently updates its softwares and the latest updates came with a huge amount of information. Although CSI-COP does not deal with Apple devices, our colleague changed the settings of the updates according to her needs, bearing in mind what she learned about data protection from the project. Analysing, understanding and modifying the settings took her a considerable amount of time.

Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?
Convenience, and more specifically lack of time plays the most important role in cases where we still do not pay enough attention to online privacy issues. Undoubtedly, time pressure is the most prominent factor derailing us from managing cookies more consciously. One member of NaTE's team indicated that the extent to which the topic of a given website interested her was also a decisive factor in terms of the amount of time she was willing to spend managing cookies.
If the website is interesting to her, she looks at what the cookie banner offers. If there is an opportunity to learn about the content without managing the cookies, she runs through it, if not, she goes to the settings. If the content of the website is important for her, she carefully reads the privacy description and the cookie management options and disables cookies that are not absolutely necessary for a satisfactory user experience.

Do team members ever check privacy policies of websites. If yes, please give an example of a website privacy policy that you read – please provide screenshot with name of website the privacy policy is for.
NaTE team members check privacy policies of websites to an increasing extent. We usually review the privacy statements of the websites we visit most often and we disable cookies transmitted to third parties if the cookie policy of the website clearly allows it.
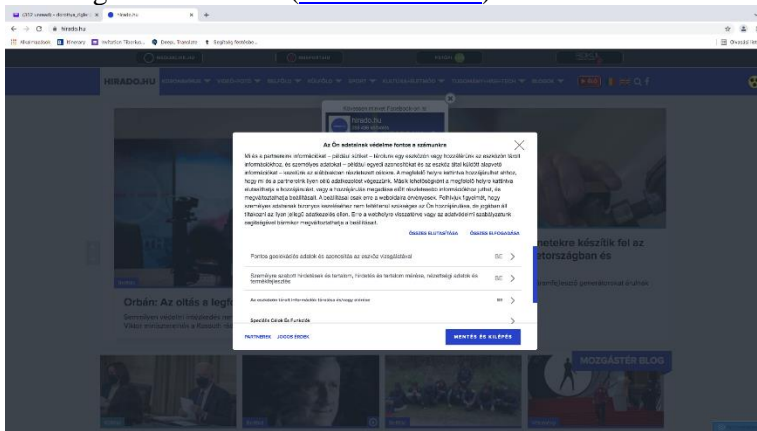Some examples of privacy policies on Hungarian websites checked by NaTE members (2021.11.05. and 2021.11.09.):
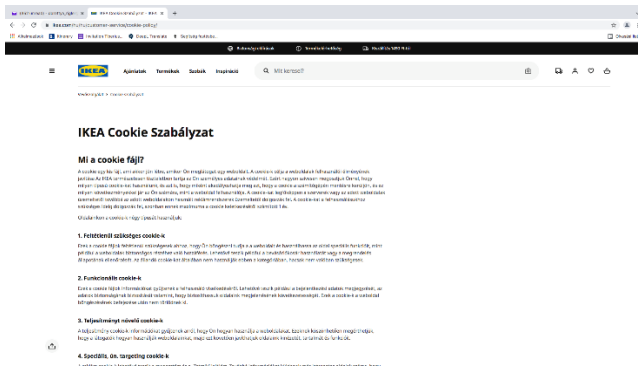- an online bookstore (www.libri.hu):
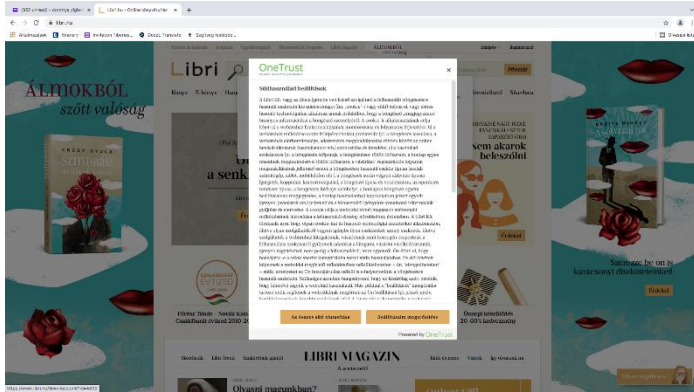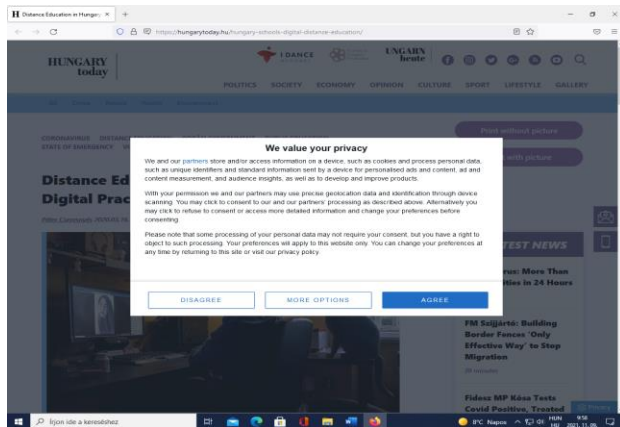
- a Hungarian news site (www.hirado.hu):
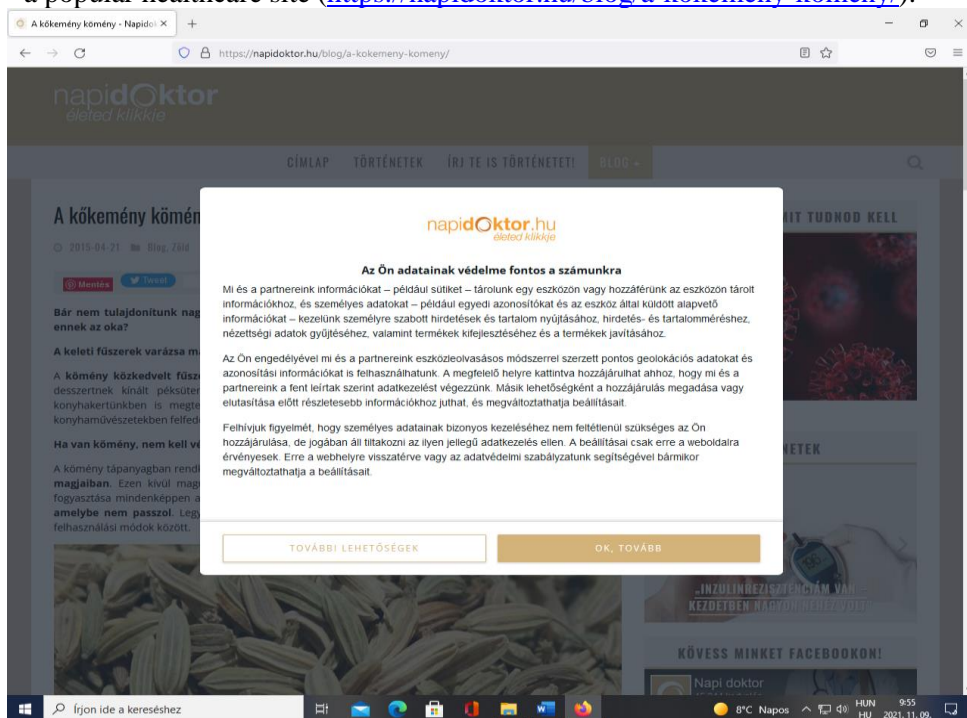

- the local site of IKEA (www.ikea.com/hu/hu):
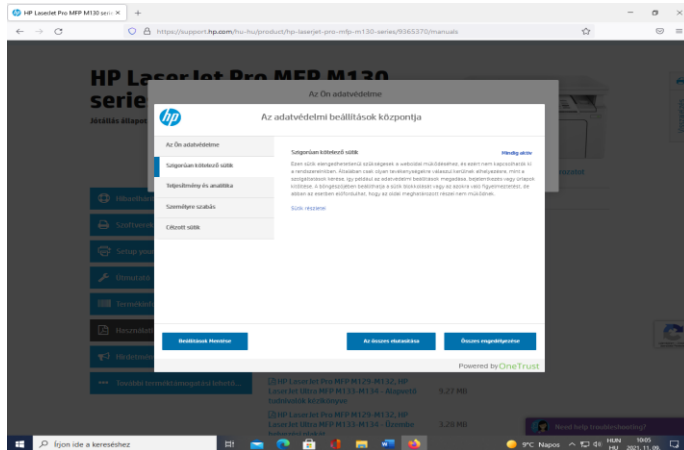

- a Hungarian distance education site (https://hungarytoday.hu/hungary-schools-digital-distance-education/):

- a popular healthcare site (https://napidoktor.hu/blog/a-kokemeny-komeny/):

- a HP laser jet printer manual (https://support.hp.com/hu-hu/product/hp-laserjet-pro-mfp-m130-series/9365370/manuals):

Do team members use apps, if so: *Do you download and use*
One of the NaTE colleagues claims that she has never used apps. Another member of our team reported that since becoming familiar with the content of CSI-COP's MOOC she deleted every app from her Android device, except for the ones that are absolutely necessary for her everyday life during COVID-19 (e.g. the app of a local home delivery service).

Have the CSI-COP partner analysed their own organisation's website for cookie policy? *If so, what was the result of the analysis (for example, if you used a tool to analyse, or conducted an analysis without a tool), please provide screenshots for evidence*
NaTE carried out a privacy analysis on the organisation's website (https://nokatud.hu) on 21.07.14.
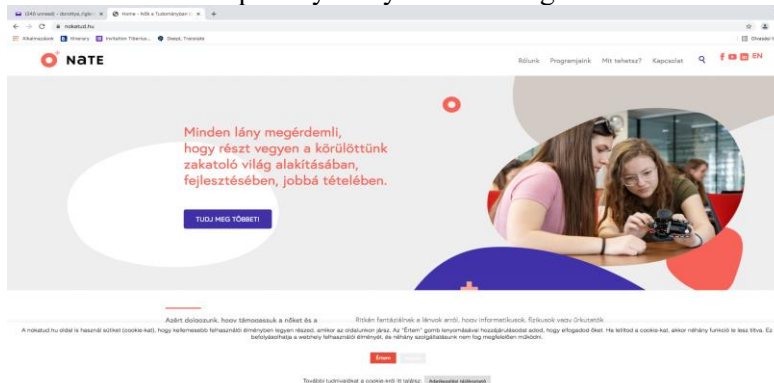
The "Privacy Policy" on NaTE's website (see below) is an easily noticeable, long and comprehensive description that details the data management policy and practices of the organisation. It also gives information about the cookies embedded in the website. However, the Privacy Policy is available only in Hungarian.
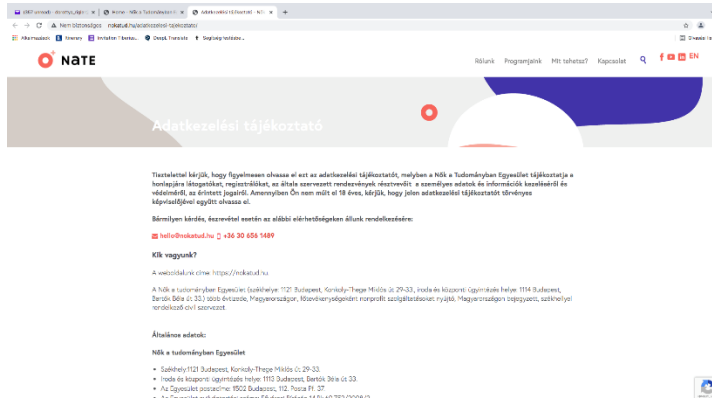
Using the online tool Webkoll
(https://webbkoll.dataskydd.net/en/results?url=http%3A%2F%2Fnokatud.hu) analysis revealed **8 first-party cookies, 1 third-party cookie and 46 third-party requests (46 secure, 0 insecure) from 12 unique hosts.**

Investigation using the online tool Blacklight (https://themarkup.org/blacklight?url=nokatud.hu) showed **4 ad trackers** (the average found on popular sites is 7). Blacklight detected trackers on the page sending data to companies involved in online advertising. Blacklight detected scripts belonging to the companies Facebook, Inc. and Alphabet, Inc. **1 third-party cookie was found** (the average found on popular sites is 3).

Wider society

NaTE's activity in the project resulted in the first completion of the CSI-COP MOOC in English by a member of the public engaged through NaTE activities. Although this kind of impact is very difficult to measure in the short run, the members of the NaTE team believe that its efforts to reach the relevant stakeholders and draw their attention to the topic of online data protection lead to an increased awareness of the subject in NaTE's broader circles.

In addition to promoting the topic of CSI-COP, NaTE's participation in the project also raises awareness of the concept of citizen science in our country, which can bring about a cultural shift in certain communities that is in accordance with the objectives of Horizon 2020 SwafS Programme. This longer term societal impact is considered very important in Hungary, which is a country lacking traditions of civic initiatives and voluntary activities.

Appendix 4: Partner 5 UOULU

What impact has being on the CSI-COP project had on partner team members?
Working on the project has widened the knowledge of the topic.

Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?
It is worth noting that still exist websites that do not offer customisation of cookie settings at all, or in practice they make this impossible by limiting or even blocking website functionalities in lack of a full consent. In this case, often the website is left unvisited, but in some cases it is balanced with the need to access and the annoyance of the cookies that stay present until the session ends and the cookies are removed.

Do team members ever check privacy policies of websites? If yes, please give an example of a website privacy policy that you read – please provide screenshot with name of website the privacy policy is for.
It sometimes gets frustrating due to the cookie policy implemented by a large portion of websites, and challenging due to the choices of a few websites. CSI-COP UOULU team take their time to select the proper option, when this is choice is made available. Before proceeding, privacy policy is checked.

An example for Oulu newspaper Kaleva (https://www.kaleva.fi/) is shown in the screenshot below. The visit to the website cannot start until a choice about the cookies is done, with the possibility to accept all or proceed to settings, where the cookie policy is given and rejecting all is only one click away from the "accept all" choice (legitimate interest is active by default, but it is removed with the "reject all" choice).
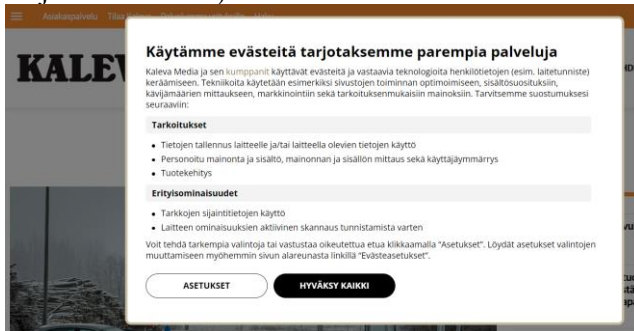
SETTINGS

Tarkoitukset

Tietojen tallennus laitteelle ja/tai laitteella olevien tietojen käyttö ⌄

☐ Suostumus

Personoitu mainonta ja sisältö, mainonnan ja sisällön mittaus sekä käyttäjäymmärrys ⌄

☐ Suostumus ☑ Oikeutettu etu

Tuotekehitys ⌄

☐ Suostumus ☑ Oikeutettu etu

Tarkkojen sijaintitietojen käyttö
☐ Suostumus
Toimittajat voivat
• kerätä ja käsitellä tarkkoja sijaintitietoja yhden tai useamman tarkoituksen tueksi.

Huom. Tarkat sijaintitiedot tarkoittavat, että käyttäjän sijainnin tarkkuutta koskevia rajoituksia ei ole; sijainti voidaan määrittää muutaman metrin tarkkuudella.

Laitteen ominaisuuksien aktiivinen skannaus tunnistamista varten
☐ Suostumus
Toimittajat voivat
• luoda tunnisteen käyttäen tietoja, joita on kerätty skannaamalla aktiivisesti tiettyjä laitteen ominaisuuksia, kuten asennettuja fontteja ja näytön resoluutiota
• käyttää tällaista tunnistetta laitteen tunnistamiseksi uudelleen.

(HYVÄKSY KAIKKI) (HYVÄKSY VALITUT) (ESTÄ KAIKKI)

| LEGITIMATE INTEREST |
| REJECT ALL |

Do team members use apps? If so, do you download and use? Have you checked permissions in the apps?

Apps are used for both work and free time. In any case, the set of apps is kept to the minimum required and privacy policies are checked before installation. Some apps are required, like Microsoft Authenticator, or highly useful, for example Microsoft Teams, Webex Meet and GoToMeeting. The Exodus Privacy report for the first two apps (overleaf), show that they may have some issues, partly correctable, as for example permission may be set appropriately (see overleaf).

![CSI-COP logo]
Citizen Scientists Investigating Cookies & App GDPR Compliance

Authenticator

6 trackers   **30** permissions

Version 6.2110.7183 - see other versions
Source: Google Play
Report created on Nov. 5, 2021, 2:30 p.m.

See on Google Play >

6 trackers

We have found **code signature** of the following trackers in the application:

Adjust >
(analytics)

Google Analytics >
(analytics)

Google Firebase Analytics >
(analytics)

Microsoft Visual Studio App Center Analytics >
(analytics)

Microsoft Visual Studio App Center Crashes >
(crash reporting)

OpenTelemetry (OpenCensus, OpenTracing) >
(analytics)

A tracker is a piece of software meant to collect data about you or your usages. Learn more...

30 permissions

Authenticator

AVAA   POISTA   PAKOTA LOPETUS

Ilmoitukset
~0 ilmoitusta viikossa

Käyttöoikeudet
Käyttöoikeuksia ei ole myönnetty

Teams

3 trackers   **50** permissions

Version 1416/1.0.0.2021173701 - see other versions
Source: Google Play
Report created on Nov. 10, 2021, 7:15 a.m.

See on Google Play >

3 trackers

We have found **code signature** of the following trackers in the application:

Bugsnag >
(crash reporting)

Google Firebase Analytics >
(analytics)

Microsoft Visual Studio App Center Crashes >
(crash reporting)

A tracker is a piece of software meant to collect data about you or your usages. Learn more...

### 50 permissions
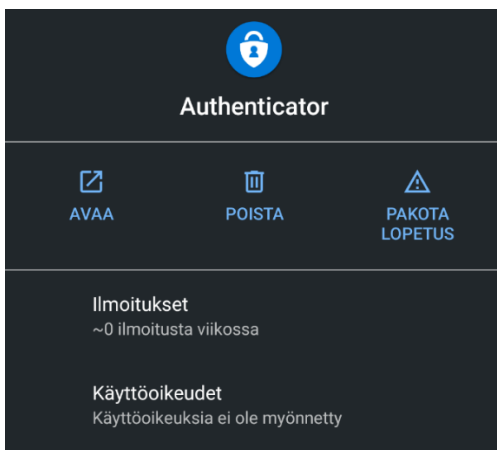
Have the CSI-COP partner analysed their own organisation's website for cookie policy? If so, what was the result of the analysis (for example, if you used a tool to analyse, or conducted an analysis without a tool), please provide screenshots for evidence.

The University of Oulu has hugely improved their cookie policy. The pre-existing situation was of hidden information about cookies and impossibility to deactivate them. After the CSI-COP project team internal feedback, the University of Oulu website cookie policy is much better. As shown from the screenshots, the first given option is to proceed with only necessary cookies and the default setting matches this. The "show details" link opens a frame with the details of the cookies divided by category.

The webbkoll analysis of the website reports no cookies but a number of third-party requests.
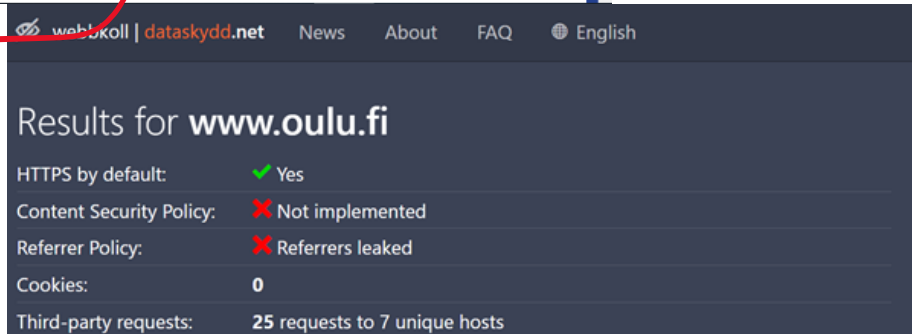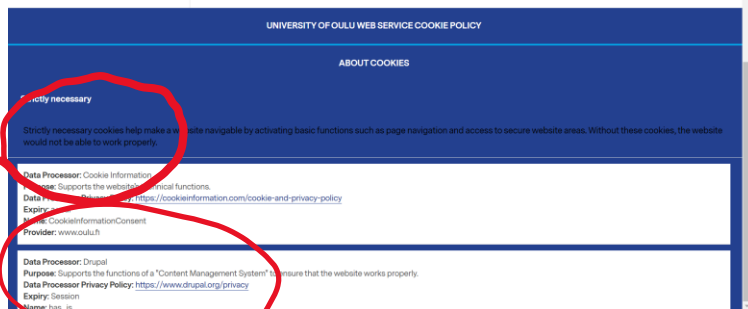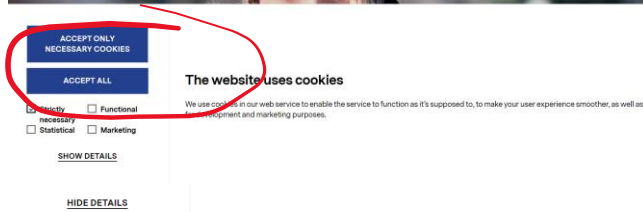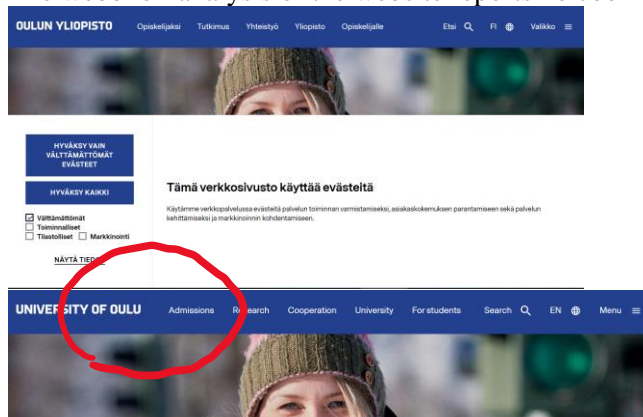
Have you been in touch with your organisation to make any changes in your organisation's website, if your analysis showed improvements could be made to make it more GDPR-compliant? Please provide screenshots for evidence.
Yes, see above the result after the improvement process.

Have you been in touch with other organisations about their websites with respect to improving GDPR-compliant? Please provide evidence, such as names of organisations and dates of contact
No.

Wider society
Beyond the project team and the partner organisation, they have been reminded while disseminating about CSI-COP project within the scientific and technical community, through participation to seminars and through social media (LinkedIn). Moreover, privacy issues have been discussed with neighbours, family and friends.

Appendix 5: Partner 6 BIU

What impact has been on the CSI-COP project had on partner team members?
Both BIU team members are from the information science department, therefore the issue of online privacy is well known to us. However, thanks to our participation in CSI-COP we learned new concepts and tools for examining sites and apps for cookies and privacy violations as well as received a deeper understanding of the GDPR regulations and privacy threats online.

Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?
No longer, while in the past we used to approve cookies automatically, today, we know where the information about us and our online behaviour may end up, and therefore, usually, we avoid using sites and apps that require cookies approval.

Do team members ever check privacy policies of websites. If yes, please give an example of a website privacy policy that you read – please provide screenshot with name of website the privacy policy is for.
Yes!
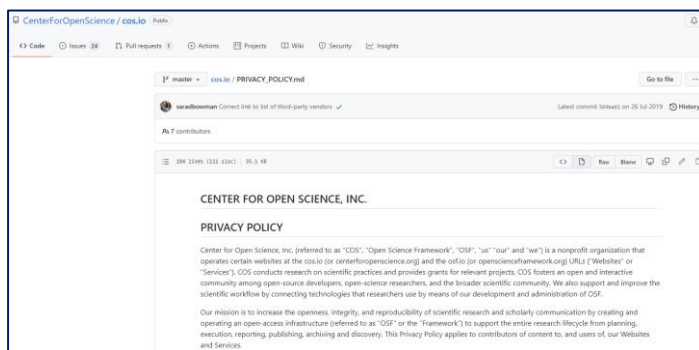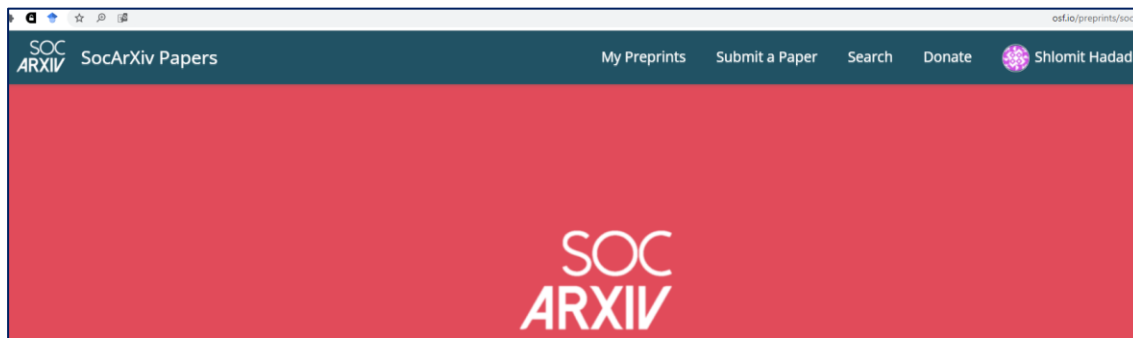
Do team members use apps?
Yes

Do you download and use?
Yes

*Have you checked permissions in the apps?*
Yes

Have the CSI-COP partner analysed their own organisation's website for cookie policy? If so, what was the result of the analysis (for example, if you used a tool to analyse, or conducted an analysis without a tool), please provide screenshots for evidence.
Yes.
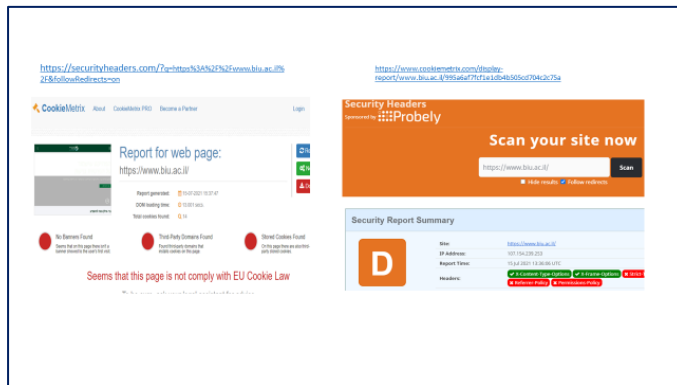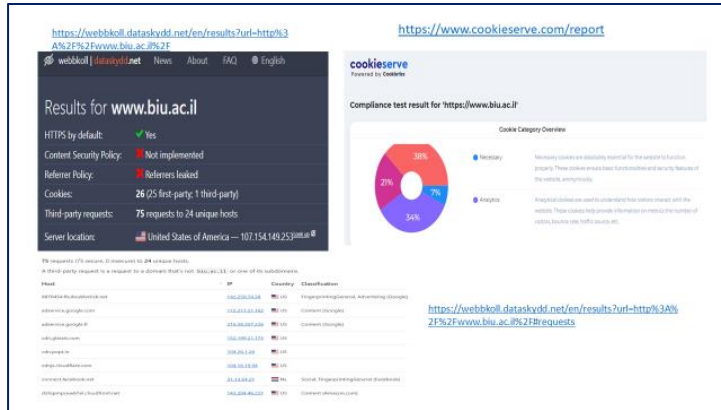
Have you been in touch with your organisation to make any changes in your organisation's website, if your analysis showed improvements could be made to make it more GDPR-compliant? Please provide screenshots for evidence.
We have approached the BIU website manager and asked for a meeting to discuss cookies usage in BIU site, but there was no response yet and no actual action was taken so far by the university to change the website as for now.

Have you been in touch with other organisations about their websites with respect to improving GDPR-compliant? Please provide evidence, such as names of organisations and dates of contact
No.

Wider society
Our partnership with CSI-COP has a wide societal impact. The university PR department assisted us with the publication of the project press release and CS recruitment advertisements, and as a result we were approached by students, librarians, teachers, lecturers, lawyers, and others who were interested in the project. In addition, we used personal mailing lists and social networks to spread a word on the project to our friends, colleagues and family, who were very excited about the project and found its topic very relevant for them. Some of them joined the project and did the MOOC and are currently

actively participating in the cookies data collection and reporting. Some of them also expressed interest in attending the upcoming CSI-COP workshop based on the MOOC content.

Link to ISRAEL365 NEWS: https://www.israel365news.com/194115/most-of-us-are-unaware-of-threats-to-our-online-privacy-and-how-to-prevent-invasion-of-online-privacy-heres-how-to-fight-them/?fbclid=IwAR3UzJ2kdB8vVTd5rBhjDN7vdCMT-DkIJ3FHHPdPAeQFUBj7XIdV-UjHPKQ

Link to the university website (article in Hebrew): https://www.biu.ac.il/en/node/9230

Appendix 6: Partner 8 CTU

What impact has being on the CSI-COP project had on partner team members?
The project has impacted their behaviour: Currently, they pay much more attention to signs of the tracking on the websides they visite and they are more sensitive to quality of provided information about use of cookies.
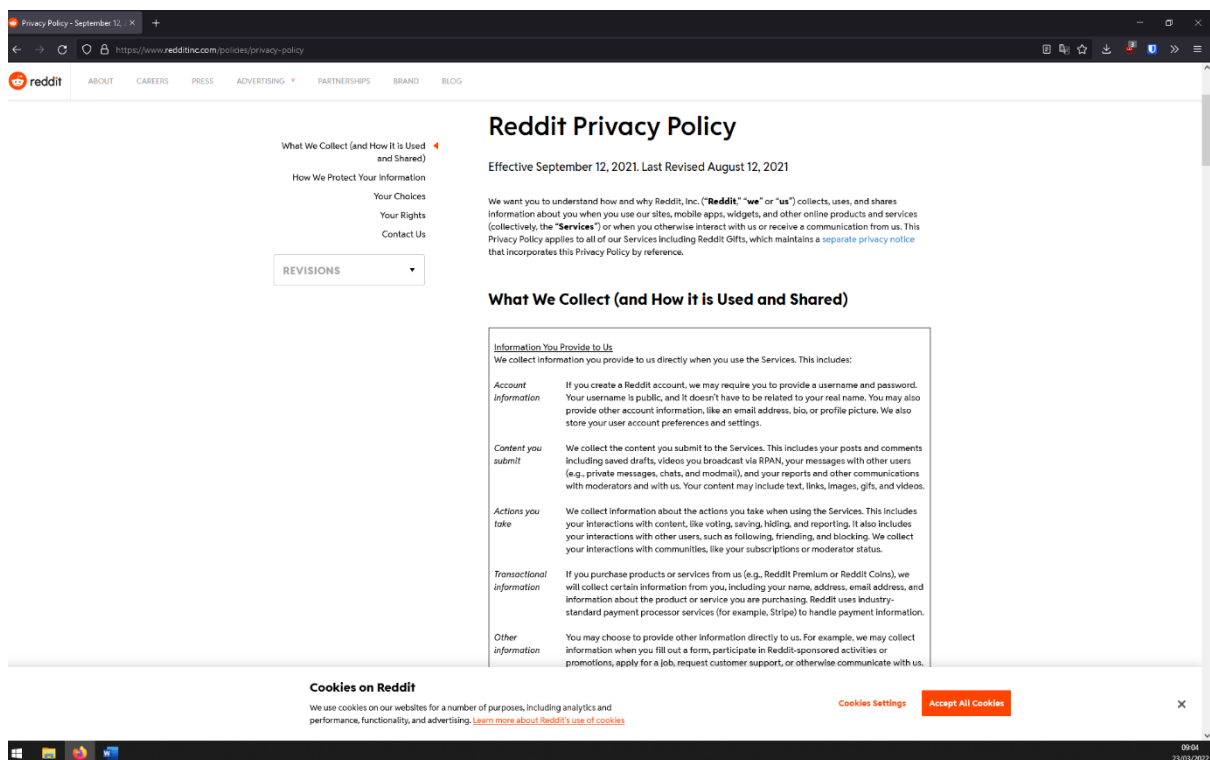
Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?
All the CTU team members are more cookie cautious now. But all over it, their behavoiur under time/stress is not perfect, yet.

Do team members ever check privacy policies of websites? If yes, please give an example of a website privacy policy that you read – please provide screenshot with name of website the privacy policy is for
A well maintained website is for example https://www.newscientist.com/
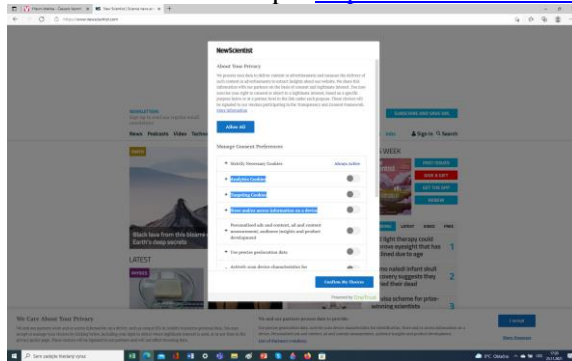
Do team members use apps? Yes
Do you download and use. Yes, e.g. Waze,WhatsApp
Have you checked permissions in the apps? Yes

Have the CSI-COP partner analysed their own organisation's website for cookie policy?If so, what was the result of the analysis (for example, if you used a tool to analyse, or conducted an analysis without a tool), please provide screenshots for evidence
Our own institute does not inform its reader about its cookie policy. The remedy has been requested from the webmaster (an outsourced company) and currently we are hoping that the solution will be delivered soon. The current webpage has been analysed using webbkoll and here is the result:
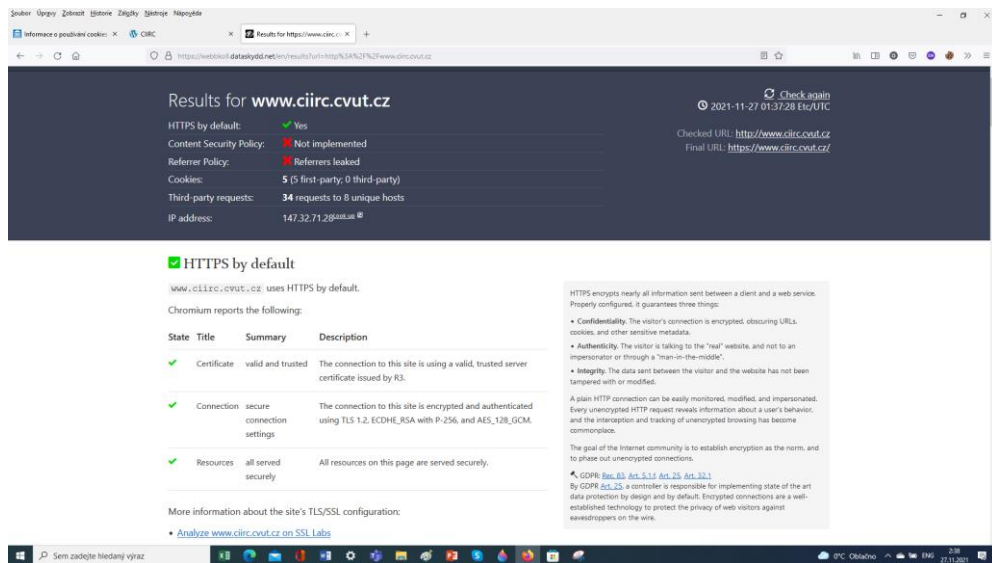
CTU general webpage https://www.cvut.cz *has a clearly described cookie policy:*
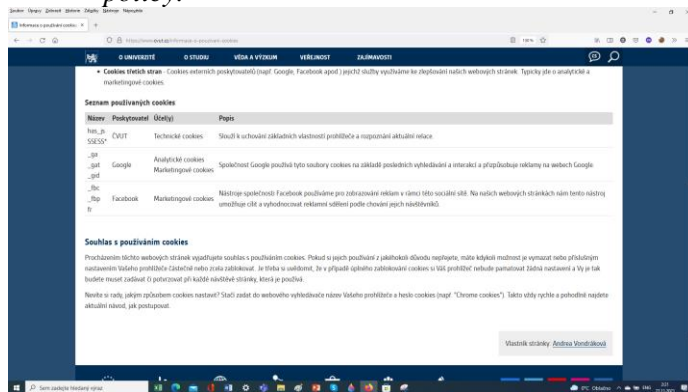
Have you been in touch with your organisation to make any changes in your organisation's website, if your analysis showed improvements could be made to make it more GDPR-compliant? Please provide screenshots for evidence.

We have identfied a problém with the website of our institute and now we are waiting for an upgraded webpage.

Appendix 7: Partner 9 STELAR

What impact has being on the CSI-COP project had on partner team members?
While the team at STELAR is already informed and cautious in privacy matters, being involved in the CSI-COP project has made team members more aware on issues that are not as well-known. Issues such as the fact that some website may install cookies even after a user rejects them have been eye-opening. Also, it has made us aware of tools which help analyse websites and better inform us on who's tracking us.

Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?
While we do try to always inform ourselves on the cookie policy of each website we visit, there may be times that convenience will lead us to accept all cookies when there is no "refuse all" option immediately available.

Do team members ever check privacy policies of websites?
After our involvement with this project, yes, we are reading privacy policies of websites more often, especially for websites where we do have to provide our own data. One example of a website privacy policy that we studied lately was reddit.com which can be found here:
https://www.redditinc.com/policies/privacy-policy

Do team members use apps, if so:Do you download and use Have you checked permissions in the apps?
Yes, we use apps, and unless the permissions are required for the functionality of the app, they are always refused. Whenever possible, we also use ad blocking services.

Have the CSI-COP partner analysed their own organisation's website for cookie policy? If so, what was the result of the analysis (for example, if you used a tool to analyse, or conducted an analysis without a tool), please provide screenshots for evidence

Yes, we have analyzed our website using tools such as webkoll and pagexray. The analysis showed that the website does not use any tracking cookies or services. It only uses 6 first-party cookies which are mainly used to record user preferences regarding their cookie policy choices.

Have you been in touch with your organisation to make any changes in your organisation's website, if your analysis showed improvements could be made to make it more GDPR-compliant?

No, the privacy and cookie policies are adequate.

Have you been in touch with other organisations about their websites with respect to improving GDPR-compliant? Please provide evidence, such as names of organisations and dates of contact.

Not yet. However, after our involvement on this project, we are planning to do so from now on when we see glaring cases of privacy issues on a website's policy.

What impact has your partnering in CSI-COP had on the wider society? For example word-of-mouth with neighbours, family, friends leading to completion of the informal education MOOC, or attendance interest in a forthcoming CSI-COP workshop based on the MOOC content.

As a team we have always been very "privacy-forward". Always discussing with colleagues and friends about these matters, trying to persuade them that "your privacy matters". Our involvement in the CSI-COP project has made us more aware of everyday examples where our privacy may be affected, and it can be more persuasive to people who may not have any interest or may have not considered their online privacy yet.

Appendix 8: Partner 10: IB

What impact has being on the CSI-COP project had on partner team members?
The IB team members received more enthusiasm to spread the news re. internet tracking and to attract lay citizens next to researchers for a joint effort to combat bad practices.
We are also more cautious re. websites and apps (trackers). We also learned about new tools.

Does convenience sway your behaviour when you visit a website, time dictates how you deal with a cookie banner, say?
No, we take time to watch for ourselves against cookies

Do team members ever check privacy policies of websites? If yes, please give an example of a website privacy policy that you read - please provide screenshot with name of website the privacy policy is for
We also made videos, to convince more people to move away from webistes and app with bad practices. Here are some examples:
https://vimeo.com/507975440/007aa13057
https://vimeo.com/516282541/60ce1a00d0
See also the images below

Do team members use apps, if so:
Yes

Have you checked permissions in the apps?
Yes and we make sure we limit the use of cookies to the necessary minimum level.

Have the CSI-COP partner analysed their own organisation's website for cookie policy? If so, what was the result of the analysis (for example, if you used a tool to analyse, or conducted an analysis without a tool), please provide screenshots for evidence
Yes. As a small organisation, we don't have a software development team that could build the website from the scratch, so we use website building tools (website templates). These websites use cookies which they claim are absolutely necessary for their builder to work. On our side, we add no further cookies and we switch all the "optional" cookies off by default. Our operating model doesn't count on collecting data from our website visitors. We don't have apps for our business.

Have you been in touch with your organisation to make any changes in your organisation's website, if your analysis showed improvements could be made to make it more GDPR-compliant.
IB continuously look to reduce the number of cookies on our website. For example, we did some specific work to turn off by default non-essential cookies on our website.

Have you been in touch with other organisations about their websites with respect to improving GDPR-compliant? Please provide evidence, such as names of organisations and dates of contact.
Yes, with some. We had a number of calls with our suppliers and made sure that we determined to work with them for reducing their data collection business models. We also looked for alternatives and proposed across our partners for the case of websites with heavy number of cookies (e.g. replacing Doodle with **Framadate**).

What impact has your partnering in CSI-COP had on the wider society? For example word-of-mouth with neighbours, family, friends leading to completion of the informal education MOOC, or attendance interest in a forthcoming CSI-COP workshop based on the MOOC content.

IB constantly communicate our work with intimate and with wider networks. This includes research funders (e.g. Romania, Bulgaria), Academies of Science (e.g. Hungary), several conferences (Croatia, Turkey, Latin America and Caribbean, Rome, Stockholm, MDPI, CERN, University of Geneva).
On the personal level, we engage with neighbours, kids' schools, kids' sport club parents).