

Assessment of videoconference and webinar tools for the EDPS

Background

With the spread of the Covid-19 pandemic, organisations are no longer able to act and work in physical proximity and are unable to organise in-person meetings. Consequently, there is a critical business need for secure audio/video conference and webinar solutions (hereinafter “VC”) which allow for reliable communications online, in compliance with applicable data protection rules.

In this context, the EDPS is looking for viable solutions, which could integrate effectiveness, cost sustainability and compliance with data protection and security requirements.

Purpose

The Technology and Privacy (TP) unit was tasked with exploring and finding adequate tools for EDPS use cases. This note serves to document the ongoing efforts to identify viable solutions in the short term for use with external participants.

This document lists the use cases and their requirements. It features a table with a shortlist of tools with their features and their ability to support those use cases. For each and every use case, a conclusion is drawn as to the best supporting tool to be submitted to tests.

For the medium-long term, other solutions could be assessed more in detail due to rapidly evolving changes in the VC tools landscape as well as to possible different EDPS resource availability and priorities.

Scope

This section identifies what is considered in and out of scope for this assessment.

Includes ("IN" Scope):

- Methodology for quick assessment
- Immediate use cases (for 2020) and their requirements
- Pre-selection of tools
- Basic assessment of pre-selected solutions against use case requirements

Excludes ("OUT" Scope)

- Tools part of unified communications offer from EP, solely for internal use (Jabber with Multipoints)
- Detailed assessments of available solutions on the market
- Lines to take and data protection guidance to other EUI for videoconference and webinar tools
- Considerations for satisfying EDPS VC needs beyond 2020, subject to a separate analysis of the overall organisational IT needs.

Methodology

TP has inventoried a large number of possible VC solutions¹ based on their features and compliance with data protection and security requirements. In parallel, we identified use cases and relevant functional requirements. Due to the necessity of identifying and testing a limited number of tools, we made a shortlist based on some key criteria, including:

¹ They are reported here: <https://saas.fabasoft.com/edps/mx/COO.6515.100.2.396786>



- the potential number of participants in meetings;
- features provided for different use cases, with a distinction between tools geared towards conducting meetings (all participants able and expected to interact in small number videoconferences) versus webinars (where a few presenters present to large audiences, with recording capabilities)
- the expected level of confidentiality and data protection assurance;
- the level of institutional control on the solution;
- the current availability of VC tools within the offer from the EP in the context of the Service Level Agreement (SLA) we signed with them;
- the existence of turnkey solutions as fall-back options in case the others turn out inadequate.

Further info on some of the discarded solutions can be found in Annex I

Use cases and their requirements

The main use cases identified for online meetings and webinars the EDPS organises are the following:

- 1. Work meetings** organised by EDPS staff, with staff from other EUIs or external stakeholders and a limited number of participants. This includes meetings of the **Supervision Coordination Groups (SCGs)** from EDPS and national DPAs.
 - a. The **number of participants is limited** (up to 25, with the exception of 50 for SCGs)
 - b. Confidentiality requirement: up to very high
 - c. Need to connect also from within the EUIs and national administrations' infrastructure, which entails the availability of a web client (usually not possible to install ad hoc apps)
 - d. Usually no recording
- 2. DPO meetings**
 - a. The **number of participants** is high (70-120, limiting the number to 2 per EUI)
 - b. Confidentiality requirements: high, since DPOs will probably share concerns and pose questions from which EUI legal compliance (or lack of) could be inferred.
 - c. Need to connect also from within the EUIs infrastructure, which entails the availability of a web client (usually not possible to install ad hoc apps)
 - d. Possible recording
- 3. Training sessions and online events (e.g. IPEN and international organisations workshops)**
 - a. The **number of participants** is high (above 50, no upper limit yet 300 is acceptable)
 - b. Confidentiality requirements: none or low. We might though need some moderation features, e.g. in chats.
 - c. Need to support a large variety of clients, at least the most popular browsers
 - d. Recording

Other common requirements:

- e) Data protection compliance. Relevant organisational risks, incl. reputational ones, need considering, too.
- f) Information Security risks, such as exposure of EDPS information, risks related to inherent technical vulnerabilities, integrity and availability.
- g) Screen/content sharing needed to show presentations
- h) Interaction with speakers requires "raise hand" function and/or chat.
- i) Client bandwidth requirements. Ideally, people with low quality Internet connections should be able to join the events, too.
- j) Cost

Pre-selected tools

The pre-selected tools are:

- **Webmeeting.** The tool is within the European Parliament IT service offer. We can use it in the context of the EDPS SLA with the European Parliament for up to 50 participants at no extra cost.
- **Cisco Webex Meeting.** The tool is within the European Parliament IT service offer. We can use it in the context of EDPS SLA with the European Parliament at a very small cost per minute (0.0158 EUR). The EP has signed with British Telecom (BT) a specific contract within the inter-institutional framework contract DI/07540 (WACS II), managed by EC DIGIT and providing web and audio conferencing services, including Cisco Webex Meeting. While the WACS II framework contract is set to expire in November 2020, we do not currently know the end date of the specific contract of the Parliament.
- **Big Blue Button (BBB).** This is an open source solution used by many educational institutions. Currently, software issues involving outdated browsers prevent connections to BBB from EC and EP networks. A solution should be available in June 2020. Then, BBB can be deployed by a cloud service provider and managed by EDPS staff, or used as a Software as a Service (SaaS) in the offer from a service provider.

Tools features and requirements vs use cases

1. Work meetings with limited number participants (including SCGs)

Requirement	WebMeeting	Webex	BBB
a) number of participants	Yes ²	Yes	Yes
b) confidentiality	Yes	Partial ³	Partial ⁴
c) Connection possible via web browsers	Yes	Yes	Partial ⁵

2. DPO meetings

Requirement	WebMeeting	Webex	BBB
a) number of participants	No	Yes	Partial ⁶
b) confidentiality	Yes	Partial	Partial
c) Connection possible via web browsers	Yes	Yes	No

² For SCGs, usually with more than 25 participants a special configuration needs to be requested to the EP. Request is ongoing. We do not expect high availability, though, so far.

³ The current security assessment identifies possible risks of unauthorised access and eavesdropping, due to lack of end-to-end encryption (which is though common to most of the VC services due to technical limitations) but mainly to localisation of servers outside the EU/EEA.

⁴ Depending on the location of the server and to assurances from the service provider. See also footnote 3 for lack of end-to-end encryption. End-to-server encryption is supported, though. Until planned update for EUIs corporate Firefox version, only phone dial in and slide sharing is available for users on EUI corporate devices.

d) Recording	No	Yes	Yes
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3. Training sessions and online events

Requirement	WebMeeting	Webex	BBB
a) number of participants	No	Yes	Yes
b) confidentiality	Yes	Yes	Yes
c) Connection possible via web browsers	Yes	Yes	Yes ⁷
d) Recording	No	Yes	Yes

Shared requirements

Requirement	WebMeeting	Webex	BBB
e) Data protection compliance	Yes, based on EP statement	To be completed ⁸	Yes, yet provider-dependent
f) Info Security risks	Yes	Yes	To be defined
g) Screen/content sharing	Yes	Yes	Yes
h) Interaction with speakers requires “raise hand” function and/or chat	Chat No raise hand	Yes	Yes
i) minimum bandwidth required	<u>2 Mbit/s, or only audio</u>	<u>0.7 Mbit/s (content + only presenter video)</u>	<u>1 Mbit/s recommended</u>
j) Cost	No additional cost	Low per minute cost	use-dependent or approx. 500 EUR/month for hosted solutions

Data protection compliance for pre-selected tools

- WebMeeting.**

The tool is installed in the EP’s data centre and the EP recommends it for confidential meetings with external people. The EP offers a [WebMeeting data protection statement](#), which provides a good level of assurance. So far, we have no more information on the contractual agreements pinpointing this service.

- Cisco Webex Meeting**

⁸ See section on Data protection compliance for pre-selected tools.



The framework contract DI/07540 (WACS II) with British Telecom (BT), including Cisco Webex Meetings, was amended to integrate data protection contractual clauses as provided by Article 29 (3), of Regulation 2018/1725. On the other hand, having a look at the general privacy policies of Cisco (acting as a sub-contractor to BT) we are not completely reassured that they fully comply with EU data protection law (e.g. possible transfers of personal data to third parties, server locations outside EU/EEA). A joint action by the EDPS and EP DPOs is ongoing to ascertain that Cisco provides adequate safeguards and guarantees as sub-processor. End-to server encryption is available (protection against third party eavesdropping, but for server administrators).

- **Big Blue Button.**

We are looking for a solution where the BBB solution be deployed within the EU/EEA. The ability to manage our BBB server might enable us higher level of data protection compliance, yet it entails a great amount of specialized human and technical resources in order to meet best practices in professional IT management and IT security requirements. If used by a SaaS service provider, it will depend on their data protection practices and their level of IT management / IT security posture. End-to server encryption is available (protection against third party eavesdropping, but for server administrators).

Suggested options to be submitted to tests (to date)

- a) **Work meetings with limited number participants (including SCGs):** Webmeeting
- b) **DPO meetings:** Webex Meeting
- c) **Training sessions and online events:** BBB for the IPEN workshop, with WebEx as fallback.



Annex I

Solutions we have tested and discarded include:

- Zoom.us, currently the most popular videoconferencing on the market but with a history of security flaws, discarded on advice of CERT-EU pending at least a 90 day period during which they intend to achieve full compliance with security and data protection requirements, providing end-to-end encryption ([E2E](#)) and possibility to choose the data centre used for the cloud hosting, among many other security and trust-enhancing measures
- GoToWebinar.com, the most popular webinar solution provided by US company LogMeIn, provides easy-to-use interface, but was found lacking configuration options for compliance with data protection requirements, especially considering that they just introduced automatic transcription, with unclear opt-in opt-out options in the cloud
- Whereby.com, is a small scale videoconferencing solution provided by Norwegian company, limited to max 50 participants with 12 video connections at the same time
- Pexip.com, is the Norwegian videoconferencing solution the Council uses to connect other solutions used in Member States (notably providing bridges to Microsoft and Google solutions) potentially sharing personal data with these third party services
- Tixeo.com is the secure videoconferencing solution recommended by the FR DPA, as the only solution on the market we are aware of that is certified by a Cybersecurity agency (the FR ANSSI in 2017), discarded as requiring installation of native client by all parties
- Forum Vision is the hosted online platform proposed by event organisation firm Forum Europe, which is geared towards big online conferences resembling traditional in-person conference settings, integrating the startup hopin.to solution, using Amazon Web Services (AWS) in the UK and US to deliver high quality events at a relatively high price. We believe its price does not justify 2020 immediate needs yet could be considered as an option for possible future big events entailing wider functional requirements and organisational support, subject to further assessment of its security and data protection stand.

In conclusion, we found most of the solutions currently available mainly lack either data protection by design and by default considerations, or the flexibility we need to deploy on EP infrastructure/in browser.