

WARNING

- The use of videoconferencing entails risks of various kinds against which greater or lesser precautions must be taken, depending on the risk to the legal validity of the defence. Indeed, the defence of a doctorate is an examination, subject to strict national regulations.
- If videoconferencing is only **used as a complement**, for example to open access to the defence beyond the audience present in the room or to facilitate the participation of a foreign professor in the Jury, the rest of this note should rather be seen as a set of useful information and good advice.
- In contrast, it should be read as a set of instructions to be applied rigorously if :
 - **the president of the jury participates in the jury by videoconference.** The president of the jury leads the debates, ensures the smooth running of the defence, the identification of the candidate and of the members of the jury, signs the defence documents in his or her name and by proxy, and announces the results.
 - **the public takes part in the presentation by videoconference only.** Indeed, the publicity of the defence and its public nature are a condition of its validity, according to a very old principle of jurisprudence which applies to other subjects (marriages for example). However, applying it when the defence is held by videoconference poses a significant risk of cyber attacks.
- *As doctoral defences are examinations, during the covid-19 health crisis, if examinations can be organised on-site, a doctoral defence can also be organised, exceptionally, on-site, with a specific health protocol. Please contact the "Maison du doctorat" if you cannot find a solution.*

BEFORE THE DEFENSE

Defense behind closed doors

- According to national regulations, the defence is public, unless an exception is exceptionally granted by the president of the university, if the subject of the thesis is of a proven confidential nature (confidential thesis). Université Paris-Saclay cannot guarantee the confidentiality of the defence when a videoconference system is used. For this reason, the defence must be held on-site if the presentation claims to be confidential.

Video capture of the defence

- The video capture of the defence, for communication purposes by the laboratory, the doctoral school or other structure, may only be made on request and subject to the explicit prior consent of the doctoral student. Discussions with the Jury must not be disseminated for communication purposes.

Public nature of the defence

- The announcement of the defence is made at least **15 days** before the date of the defence. Access to the virtual defense room is indicated in the announcement of the defense in order to guarantee the public nature of the defense.

Proxies of the members of the Jury participating by videoconference

- The members of the Jury participating by videoconference will have to give a signing proxy to the President of the Jury to sign on their behalf the minutes of the defence and the defence report. If a member of the Jury is declared as a videoconference participant to the Jury when the Jury is appointed, the proxy template

is automatically edited via Adum and is sent to him/her together with the letter appointing the Jury. The jury members send their completed and signed power of attorney to the chairman of the jury as soon as possible.

- The members of the Jury who plan to participate in the Jury by videoconference are declared at the time of the appointment of Jury and Rapporteurs. In all cases, the Doctoral School must check whether the videoconference is total or partial and record in Adum the mode of participation of each member of the Jury before the defence.
- The use of videoconferencing for doctoral defences must remain exceptional. However, it is advisable to plan to use videoconferencing a priori, as a precautionary measure, so that in the event of a change of situation, the link to the virtual examination room and the proxy models have been sent within the legal deadlines (15 days before the examination).
 - If members of the Jury declared as participant in the jury by videoconference, finally participate in person, it is not necessary to take any corrective action. Conversely, if the members of the Jury had planned to participate in person, and finally participate by videoconference, it will be necessary to ask them for a signing proxy and to set up a videoconferencing system.
 - If a member of the Jury asks to use videoconferencing at the last minute, it is necessary to make the modification on ADUM, so that he or she receives the proxy and the convocation with the links to the virtual defense room.
 - if his/her data are in the temporary Adum database: the doctoral candidate can make the modification directly
 - if his/her data are in the definitive Adum database: the doctoral candidate can no longer make the modification and the school must be notified so that it can be taken care of.

Technical guarantor

- A technical guarantor who is familiar with the chosen videoconferencing system must be mobilised to assist the use of videoconferencing system before, during and after the defense. The technical guarantor may be a member of the supervision team or a member of the research lab. or a member of the Jury other than the President of the Jury. In the absence of a local solution, the doctoral school may propose a technical guarantor to accompany the defence. Neither the doctoral candidates nor the president of the Jury can act as technical guarantor during the defense.
- Except when it is the doctoral school that proposes the technical guarantor, the access links to the virtual deliberation, defence and rehearsal rooms, the name of the technical guarantor and his/her full contact details, are provided by the supervisor, by email to the doctoral school before the defence is authorised.
- The nomination form for a technical guarantor to accompany a partial or a total videoconference doctoral defence (available in ADUM) is sent to the Doctoral School by the supervisor. It includes links to access the virtual rooms. The administrative service indicates the access links to the virtual rooms in the invitations and sends them, with the template of the proxy to the members of the Jury who participate in videoconferencing, as well as to the doctoral candidates, if applicable, and to the invited members of the Jury.

Virtual rooms and cyber attack prevention

- Three virtual rooms must be created by the technical guarantor, a virtual rehearsal room, a virtual defense room and a virtual deliberation room.
 - The public link, allowing controlled access to the virtual examination room, must be provided in the "Place of Examination" section and distributed with the announcement of the examination to ensure the public nature of the examination. Please note that this public link must **under NO circumstances** grant direct and uncontrolled access to the virtual courtroom.

- The link to the virtual deliberation room is provided only to the members of the Jury.
- The link to the virtual rehearsal room is provided to the members of the Jury, the doctoral candidates and the thesis director.
- The virtual defense and deliberation rooms are opened by the technical guarantor with the chosen videoconferencing system, which must meet the requirements of identification of the members of the Jury, confidentiality of the Jury's deliberations and must also ensure the public nature of the defense and of the debates between the candidate and the Jury.
- The system chosen must imperatively allow different rights, in the virtual presentation room, to be granted on the one hand to the members of the Jury and the doctoral candidates and on the other hand to the public.
- The diffusion of a public link to guarantee the public nature of the defence poses a serious risk of cyber attack and requires particular vigilance to avoid malicious intrusions during the defence, which are unfortunately recurrent:
 - the rights of those who connect via the public link must be parameterised, before the communication of this public link, so that under no circumstances do they have access to the possibility of adjusting the parameters, nor do they have access to the chat, the microphone or the camera.
 - notifications, in particular login notifications, can be used to saturate the screen with insults via login pseudonyms. It is imperative to deactivate all notifications for all categories of participants (presenters, participants, even moderators).
 - the public link that is broadcast in the announcement of the defence must under no circumstances allow direct and uncontrolled access to the defence room.
 - it is recommended that the public link should lead to a virtual waiting room or an airlock from which the technical guarantor can then admit people who log on to the defence room. With BBCollaborate, all you have to do is create a group for the presentation and drag people who connect via the public link to this group as they arrive. With Zoom, it is also possible, via the waiting room system.
 - alternatively, the public link can also lead to a registration portal where people wishing to attend the presentation can provide their surnames, first names and emails. The link to the presentation room will then be sent to them personally via their e-mail address, making sure that this remains possible until the presentation starts.
 - Please note that limiting the risks of cyber attacks must not prevent the public nature of the defence. The access control exercised by the technical guarantor must be limited to avoiding cyber attacks and other malicious intrusions.
- In all cases, these settings must be made before the presentation. Even when the system is well mastered and the technical guarantor knows which settings to modify, when the intrusions are massive, the continuous flow of connections can make his intervention very difficult and limit the possibility of adjusting the parameters.

Tests and preparation

- The members of the Jury who will participate in a videoconference will carry out, with the technical guarantor, at least two days before the presentation, connection tests and tests on their peripherals (microphone, camera) and will take note of the present instructions and recommendations for the smooth running of videoconference presentations.
- The doctoral candidates, before the defence, familiarises himself/herself with the chosen videoconferencing system and checks the quality of the communication and peripherals used. The use by the doctoral student of a headset equipped with a microphone is strongly recommended. A virtual rehearsal room must be proposed by the technical guarantor for this purpose.

- The supervisor makes sure that each member of the Jury has received, before the Jury, this note, the templates of the minutes of the defence and of the defence report to be completed and signed at the end of the Jury's deliberations, and makes sure to collect the signing proxies of the participating members by videoconference for the President of the Jury (who himself can participate by videoconference).
- The doctoral student must ensure that each member of the Jury has, before the start of his or her defence, the file or files supporting his or her presentation.

DURING THE PRESENTATION AND DEBATES

- The members of the Jury meet at least 15 minutes before the beginning of the defence in the virtual deliberation room, they check together the proper functioning of the microphones and cameras.
- The President of the Jury is responsible for the smooth running of the defence and the deliberations and can postpone the defence to a later date if this smooth running cannot be ensured. In this case, he/she will inform the administration, which will start the search for a new date.
- The President of the Jury reminds the members of the Jury of the good practices in terms of videoconferencing: in particular, the members of the Jury must be alone in the room where they are and have suitable means of communication. They should be careful to switch off their microphones when they are not speaking and to ask the President of the Jury to speak. The microphones of the public is cut off in all cases until the end of the debates with the Jury. It is recommended that all members of the Jury open their cameras prior to the presentation by the President to the candidate and the audience and that the cameras are then switched off during the presentation. During the debates, it is recommended that the member of the Jury who is speaking opens also his or her camera. This advice may be adapted by the President of the Jury, taking into account the communication conditions of the different members.
- The President of the Jury is responsible for the authentication of the Jury members participating by videoconference and for the smooth running of their participation in the debates during the defence and in the deliberations of the Jury. The public nature of the defence also contributes to this guarantee.
- When the chosen videoconferencing system allows it (as is the case with BBCollaborate), the technical guarantor is the moderator and can assist the president of the Jury and the candidate, managing the access of both to microphones, camera, chat etc. In this case, he or she explains his or her role in the deliberation room to the members of the Jury.
- At the time agreed for the start of the presentation, the members of the Jury, by videoconference, leave the virtual deliberation room and go to the virtual presentation room. To facilitate their authentication, by the president and the public, they use their surname, first name and role during the defence (president, examiner, rapporteur or invited by the Jury) as a login, visible to the public.
- When the chosen videoconferencing system allows it (this is the case of BBCollaborate), the technical guarantor settles the rights of the public and manages the admission of the public in the defense room. The public nature of the defence is a guarantee of the smooth running of the defence and its validity. Nevertheless, in case of intrusion or disturbance, the technical guarantor must exclude asap the intruder from the defense room.
- The President of the Jury introduces the Jury to the candidate and the public, so that everyone can witness the authentication of the members of the Jury, the members open their cameras and say a few words. The President reminds the public of the good practice of videoconferencing: in particular, the microphones of members of the public must be switched off and they must take care not to intervene during the presentation or debates.
- During the debates, the President of the Jury invites each member, to debate with the candidate. During the discussions, the cameras of the Jury member and the candidate speaking are the only ones to be open.
- At the end of the debates, the president of the Jury may invite invited members of the public to shed light on the progress of the thesis, he or she may also invite members of the public to ask questions (according to the current practice in the discipline).

THE DELIBERATION

- The President of the Jury verifies that all those taking part in the deliberation are present in the virtual deliberation room, he or she also verifies that there are no intruders in the deliberation room and that only those who are entitled to participate are present. The President of the Jury identifies the persons present for the deliberation. The use of the camera is recommended for this identification.
- After the presentation and the debates, the President of the Jury invites the members of the Jury to join the virtual deliberation room. Each member of the Jury must leave the virtual jury room to ensure the confidentiality of the discussions during the deliberation.
- During the deliberation, the public and the candidate remain in the virtual defense room to await the announcement of the results. Attention: when the members of the Jury keep both links active, it may happen that the exchanges in the deliberation room are partially heard in the virtual defense room. It is therefore strongly recommended to the members of the jury to disconnect from the virtual defense room during the deliberation.
- The President of the Jury will fill in the minutes of the defence and discuss the contents of the defence report with the members of the Jury.
 - When the President of the Jury is not physically present (full videoconference), he or she signs the minutes of the defence on behalf of all the members of the Jury who took part in the deliberation and he or she signs the defence report on behalf of all the members of the Jury who took part in the Jury, subject to having their signing proxy.
 - When the President of the Jury is physically present (partial videoconference), he or she signs the minutes of the defence on behalf of the members of the Jury who took part in the deliberation by videoconference and he or she signs the defence report on behalf of the members of the Jury who took part in the Jury by videoconference, subject to having their signing proxy. The members of the Jury present onsite sign the minutes and the defence report.

PROCLAMATION OF THE RESULTS

- After the deliberation, the President of the Jury will inform the technical guarantor that the Jury is ready to return to the defense room.
- The technical guarantor verifies the presence of the candidate and the public and informs them of the return of the Jury for the proclamation of the results.
- It is recommended that all members of the Jury participating by video-conference and the candidate open their cameras for the announcement of the results.
- At the end of the proclamation of the results, the technical guarantor is invited to grant the microphone and camera rights to the entire audience for applause and congratulations.
- The candidate is advised to plan, together with his or her technical guarantor and thesis director, a way to use video-conferencing to celebrate the festive moments following the announcement of the results, in the case of a full video-conference, or to involve the members who are in video-conference at that time, for a partial video-conference.

MINUTES AND REPORT OF THE DEFENCE

- The supervisor tells the doctoral school which member of the Jury has been selected to chair the Jury.
- The supervisor will be responsible for ensuring that the signatures have been collected and the defence documents sent to the administration.
- The president of the Jury will send all the defence documents (minutes, defence report, the Jury's opinion on the reproduction of the thesis, etc.) as well as the signing proxies that he or she has used, either to the administration or to the thesis director, who will then be responsible for doing so:

- by email in digital version to the **SCO** email address that sent him/her the invitations with the name of the doctor / defence documents in the subject line.
- or the supervisor uploads them on the link provided for this purpose in ADUM (under development)

Originals should also be sent by post to :

**MAISON DU DOCTORAT
Université Paris-Saclay / ENS Paris-Saclay
Documents de soutenance
4 avenue des sciences
91190 Gif sur Yvette**