

# Guidelines for Online or Partial Online PhD Defense

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## Organizing Online or Partial Online PhD Defenses

The following guidelines applies to PhD defenses that are organized partially or fully online due to the Covid-19 situation. The Doctoral School must process each application for online PhD defense individually. Online PhD defenses (fully or partially) is a measure that can be implemented under special circumstances. The purpose of these instructions is to ensure that the legal demand of a public defense (§19 in the Ministerial Order) is upheld. These instructions are a supplement to AAU's rules for conducting a PhD defense. The instructions are updated regularly and are currently valid until further notice.

It is possible to arrange partial online defenses, i.e. where the PhD student, chair of the assessment committee, moderator and supervisors are present at the university. The physical presence must be cleared with the Department in questions as it is the Heads of Departments that are responsible for adhering to rules of physical presence at campus (e.g. number of people in rooms, distance, hand sanitizer, face masks).

The video conference system at AAU may be used with MS Teams, Zoom and Skype for Business.

## Procedure for applying for online or partial online PhD Defense

Different procedures apply at the Doctoral Schools. Please familiarize yourself with the rules applying at your Doctoral School below.

### The Doctoral School of Social Sciences

The process is handled at the Department level. It is not necessary to apply at the Doctoral School. The Department is responsible for securing acceptance from the participants (incl. PhD student). The Department will inform the relevant parties that a lay representative will participate and what the tasks of the lay representative is.

### The Doctoral School of Engineering and Science

All PhD defenses may take place as online events **until the end of 2020**. It is not necessary to apply at the Doctoral School. The Department is responsible for securing acceptance from the participants (incl. PhD student). The Department will inform the relevant parties that a lay representative will participate and what the tasks of the lay representative is.

### The Technical Doctoral School of IT & Design

All PhD defenses may take place as online events **until the end of 2020**. It is not necessary to apply at the Doctoral School. The Department is responsible for securing acceptance from the participants (incl. PhD student). The Department will inform the relevant parties that a lay representative will participate and what the tasks of the lay representative is.

### The Doctoral School in Medicine, Biomedical Science and Technology

All PhD defenses may take place as online events **until the end of 2020**. It is not necessary to apply at the Doctoral School. The Department is responsible for securing acceptance from the participants (incl. PhD student). The Department will inform the relevant parties that a lay representative will participate and what the tasks of the lay representative is.

### The Doctoral School of Humanities

The Department forwards the request to the Doctoral School about arranging a PhD defense online – if possible three weeks prior to the defense. The application must contain the following elements:

- Name of the PhD student and time for the PhD defense
- Name of the applied technical solution
- Accept from the PhD student that the defense will be conducted online/partially online
- Accept from members of the assessment committee that the defense will be conducted online – including accept from the members that they accept the selected technical solution.
- Name of the moderator – see the specific guidelines for each Doctoral School for additional information

The application must be sent to [aauphd@adm.aau.dk](mailto:aauphd@adm.aau.dk)

Once the application is approved by the PhD Study Director – AAU PhD will notify the Department and the planning of the defense can continue. It is the Department's responsibility to inform all relevant parties.

The Department will inform the relevant parties that a lay representative will participate and what the tasks of the lay representative is.

## Planning the PhD Defense

There are different technical solutions (Microsoft Teams, Zoom, Skype for Business) that can be used for conducting an online PhD defense. We cannot recommend one over the other since the use of the application relies on the parties' experience with the different solutions. ITS offers support for the use of all three solutions including setting up a test prior to the defense and technical assistance if needed during the defense. It is a requirement that the selected solutions meet the legal requirement of a public defense – entailing that it must be possible to invite interested individuals to the defense (online participation).

ITS provides a guide for Skype for Business which can be used for conducting an online PhD defense. Guides for Microsoft Teams and Zoom are not targeted at PhD defenses. Information is found here:

<https://www.its.aau.dk/it-for-ansatte/undervisere/moeder-eksamen/online-phd-forsvar/>

The Department must ensure that the PhD defense is conducted in the best possible manner. This entails the following:

- The technical solution is tested in due time prior to the defense
- The process of the online PhD defense should be considered – depending on the applied technical solution the following things can be considered:
  - Consider how the PhD thesis is made publicly available
  - Indicate in the announcement for the defense when and how the audience can ask questions, i.e. via e-mail to be received no later than at break time.
  - Make it clear to everyone who the moderator is.
  - Assign roles in the invitation, i.e. one person can mute all other microphones/cameras
  - Only enable the camera if the bandwidth can manage it – otherwise leave it off.
  - If possible use a wired internet connection.
  - Have solutions prepared for preliminary meeting before the defense, one for the actual defense and one for the assessment committee for voting after the defense.

Appendix 1 contains additional information – this will be continuously updated as we receive information regarding the technical solutions and processes.

## Announcing the PhD Defense

It is a requirement that §19 in the ministerial order regarding public defense is met. It must be specified in the announcement how guests can gain access to the defense. It is advisable to invite guests via BCC. Please also inform people to assume an alias when entering the online platform if they wish to remain anonymous.

Example of wording that can be included in the announcement:

*"If you wish to participate in the defense, please send an email to xxx@xxx.aau.dk, and I will invite you to the session.*

*Be aware that you must be muted during the whole defense, also your camera must be off in order to maintain transmission capacity and prevent technical interruptions.*

*The defense starts exactly at xx.xx. Please, make sure that you have logged in at least fifteen minutes before that time. The session is open from xx.xx. You are not allowed to join the online session after the defense has started, neither during the break or the examination.*

*Please use an alias if you wish to remain anonymous"*

Additional information – for example when it is possible to ask questions and the like:

*There will be a short break between the defense and the opponents' questions. You have the possibility to contact the moderator by mail (or phone?) and state your question.*

## Physical presence at AAU

If the defense is arranged with physical presence at AAU this must be cleared with the Head of Department. The rules concerning number of allowed persons per square metre and use of face masks must be adhered to. If you keep a list of attendees (external visitors) for tracking purposes in case of corona contamination amongst the participants this must be done in compliance with GDPR. More information can be found here (in Danish only): <https://www.sikkerhed.aau.dk/gdpr/administrativt-personale/oplysningspligt/#458301>

Social gatherings, e.g. receptions, are not allowed.

## Recording the PhD defense

Should the PhD student wish to record the defense or parts thereof special considerations must be adhered to as a consequence of GDPR. This includes that the PhD student must document the need for recording the defense and obtain the necessary declarations of consent from the participants. In many cases the PhD student is not an employee at Aalborg University at the time of the defense and thus becomes the data controller. We advise to consider this carefully.

If the PhD student is employed at Aalborg University at the time of the defense, a template for declaration of consent has been developed by the GDPR unit. The template is available upon request to [aauphd@adm.aau.dk](mailto:aauphd@adm.aau.dk).

Departments should not record the defense solely for documentary purposes.

## The Final Assessment

The final assessment is to be signed by all members of the assessment committee. The signatures can be collected electronically by

1. A digital signature in Adobe
2. A scanned signature (the person signs the document by hand and scans the document)
3. A picture of the signature that is inserted in the document

## Specific procedures for the Doctoral Schools

### SOCIAL SCIENCES:

#### *Lay representative:*

The moderator acts as lay representative.

#### *Role of the lay representative:*

The moderator acts as the lay representative. The role of the lay representative is to ensure, that the virtual part of the PhD defense takes place as planned. The lay representative's role is to assess if fallouts are of a minor character and thus that the PhD defense can continue or if the fallouts are of a major character resulting in that the PhD defense should be interrupted and a new one scheduled. The lay representative has the deciding vote in order to cancel an ongoing defense if he/she assesses it is impossible to complete the defense due to technical difficulties (large fallouts, reduced sound quality and the like). When the defense is completed and the chairperson closes the public defense the role of the lay representative stops. The lay representative is not a part of the assessment of the defense; this is only undertaken by the assessment committee.

#### *The defense:*

The first part of the defense (the presentation by the PhD student) can be recorded on tape in advance and broadcasted to the audience by a link, if the PhD student wishes.

### ENGINEERING

#### *Lay representative:*

The moderator acts as the lay representative. If the chair of the assessment committee acts as moderator another person (minimum Associate Professor level and not the supervisor) must be appointed.

#### *Role of the lay representative:*

The lay representative is an observer who has to ensure, that the online defense is conducted properly and that there are no elements in the execution of the online defense that deteriorates or questions the assessment. After the defense the moderator must submit a report to the Doctoral School covering the technical aspects of the defense.

In the event of technical problems, the lay representative should also be able to provide advice for solutions which can help the defense to be continued. The lay representative has the deciding vote in order

to cancel an ongoing PhD defense, if he/she assesses that it is impossible to complete the defense due to technical difficulties (large fallouts, reduced sound quality and the like).

## TECH

### *Lay representative:*

The moderator acts as the lay representative.

### *Role of the lay representative:*

The role of the lay representative is to ensure, that the defense take places properly and in accordance with the ministerial order. The lay representative has the deciding vote in order to cancel an ongoing defense if he/she assesses it is impossible to complete the defense due to technical difficulties (large fallouts, reduced sound quality and the like). The lay representative reports to the Doctoral School about challenges/experiences with the virtual part of the defense.

## HUMANITIES

### *Moderator:*

A representative from the management or a person appointed by the department management.

### *Lay representative:*

Head of PhD Programme or PhD Study Director.

### *Role of the lay representative:*

When the PhD Study Director approves the application for online defense, the PhD Study Director indicates who will be the lay representative at the PhD defense. The role of the lay representative is to ensure, that the virtual part of the PhD defense takes place as planned. Together with the moderator, the lay representative's role is to assess if fallouts are of a minor character and thus that the PhD defense can continue or if the fallouts are of a major character resulting in that the PhD defense should be interrupted and a new one scheduled. The lay representative has the deciding vote in order to cancel an ongoing defense if he/she assesses it is impossible to complete the defense due to technical difficulties (large fallouts, reduced sound quality and the like). When the defense is completed and the chairperson closes the public defense the role of the lay representative stops. The lay representative is not a part of the assessment of the defense; this is only undertaken by the assessment committee.

### *Preliminary meeting:*

The preliminary meeting of the assessment committee also works as a trial call before the actual defense. The moderator participates, as a minimum, in part of the preliminary meeting in order to ensure that all formalities are in order with respect to the completion of the online defense.

## MEDICINE

*Moderator:*

Associate Professor or Professor at Aalborg University cf. rules at Medicine.

*Lay representative:*

The moderator also acts as the lay representative. The lay representative has the deciding vote in order to cancel an ongoing defense if he/she assesses it is impossible to complete the defense due to technical difficulties (large fallouts, reduced sound quality and the like). When the defense is completed and the chairperson closes the public defense the role of the lay representative stops. The lay representative is not a part of the assessment of the defense; this is only undertaken by the assessment committee.

*Preliminary meeting:*

The preliminary meeting of the assessment committee also works as a trial call before the actual defense. The moderator only participate in part of the preliminary meeting ensuring that all formalities are in order with respect to the completion of the online defense. We recommend that the external opponents send their main comments and questions beforehand to the chairman of the committee (in case of technical issues).

## Background and time frame for the instructions

The instructions are made as a consequence that all public employees without critical duties have been sent home from Aalborg University from Friday March 13, 2020 and until further notice.

The instructions deal with PhD defenses which take place at Aalborg University, and the purpose it to ensure that it is still possible to have a PhD defense at Aalborg University in the "home period" which has been a request from the management of the university.

The instructions are a result of necessary solutions to be found in situations characterized as force majeure. Several levels of the organization work with the implementation of PhD defenses in the "home period" and this may lead to updates of the instructions. We will send out information about when these instructions are no longer valid.

## Contact

Please contact AAU PhD, [aauphd@adm.aau.dk](mailto:aauphd@adm.aau.dk) if you have any questions.

## APPENDIX 1 (updated 9 November 2020)

In appendix 1 we will gather all input and experiences about available technical solutions and specific experiences based on the completed online defenses.

### Tips and tricks

- A good idea is to forward the presentation in pdf before the defense if technical problems should occur, e.g. quality of pictures.

- Initiate the defense by asking all participants to mute their own microphone and make it clear how questions are asked. Or assign roles in the invitation thus making it possible for one person to control the microphones.
- Open the microphones at relevant times for applause.
- Send invitations/emails to audience using Bcc (Outlook invitation: use "Resources")
- Advise audience to assume an alias when entering the online platform if they wish to uphold their anonymity.

A note has been developed covering input to securing a good online PhD defense. Find it here:

Medicine: <https://www.phd.medicine.aau.dk/current-phd-students/vbn-thesis-submission/>

Engineering: <https://www.phd.engineering.aau.dk/current-students/thesis-submission/>

Tech: <https://www.phd.tech.aau.dk/current-students/thesis-submission/>

Humanities: <https://www.phd.hum.aau.dk/For+Current+PhD+Students/Thesis+submission/>

Social Sciences: <https://www.phd.samf.aau.dk/rules-guidelines-forms/>

## Support

<https://www.its.aau.dk/it-for-ansatte/undervisere/moeder-eksamen/>

ITS offers a mini course in how to conduct PhD defences with online participants. More information can be found here: <https://aauplan2learn.dk/KursusValg.aspx?id=71531>

## Personal Experiences

From a PhD student combining Youtube Live with Skype for Business (excerpt):

- *I used Youtube Live for the public part. At the same time I was running a Skype for Business call with the opponents, my supervisor and the lay representative.*
- *I used OBS on my computer. This is a software that mixes pictures and sound and send it to Youtube Live. This made it possible for me to switch between pictures of my thesis, pictures of the slide show and a full screen picture of me from the web cam – very easy. The full screen picture of me proved not to be necessary but it would have made it possible to see clear lines on a whiteboard behind me if I had drawn anything.*
- *In practice my slide show was running in Presenter Mode on an external screen. This screen was shared via the Skype for Business meeting making it possible for the opponents to see it without the 7-10 second delay on Youtube Live.*
- *I used a very good microphone (borrowed) and I think that helped a lot. I got great feedback on the sound. It also made it possible for my computer speakers to play out the Skype for Business meeting with the questions from the opponents and it was then recorded for the Youtube broadcast.*
- *I started the live stream approx. 40 minutes before start – just to be sure. It was a picture of the first slide. The Skype for Business call started 10 minutes before.*
- *Almost 70 people participated through Youtube Live so in reality it was a really well attended defense. During the defense people could write in the commentary on the Youtube stream and it was really encouraging to receive the nice words and cheers.*



- *It is necessary to have a good microphone and a good and steady internet connection*
- *A better camera would have been okay but turned out not to be that necessary for me*
- *Remember to wrap up when the presentation stops. Several participants left and it would have been nice to thank them for their participation*

From a PhD student using Skype for Business (excerpt):

- *We chose to use Skype for Business. We tested it last week by having a short technical trial run (15 minutes).*
- *Before the technical trial run my main concern was if the technical side would work and if the connection would keep during the defense but after this meeting I was more calm.*
- *I also had a trial run with my presentation for a lot of the other PhD students which I recommend. You can stress test your connection and get as many as possible to listen in. There are some issues to be considered when you give an online presentation. For example it is important to talk and point with the mouse a bit slower than you usually would in case the sound or image is delayed a few seconds.*
- *Important to make the audience aware that they must mute their microphones during the presentation.*
- *Make sure only one person at a time talks*