

Waveguide

It guides the 80GHz wave

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Context of use: Education
Level of education: Bachelor

Technology Impact Cycle Tool

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Impact on society

What impact is expected from your technology?

This category is not applicable for this technology.

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Hateful and criminal actors

What can bad actors do with your technology?

This category is not applicable for this technology.

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Privacy

Are you considering the privacy & personal data of the users of your technology?

This category is not applicable for this technology.

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Human values

How does the technology affect your human values?

This category is not applicable for this technology.

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Stakeholders

Have you considered all stakeholders?

This category is only partial filled.

Who are the main users/targetgroups/stakeholders for this technology? Think about the intended context by answering these questions.

Name of the stakeholder

Chris Lee

How is this stakeholder affected?

Client/Project Supervisor

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

Yes

Name of the stakeholder

Irina van Luijtelaar-Parashiv

How is this stakeholder affected?

Project mentor

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

Yes

Name of the stakeholder

Piyush Kaul

How is this stakeholder affected?

Assistant professor TU/e

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

No

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Name of the stakeholder
Ivo Classen

How is this stakeholder affected?
DIFFER

Did you consult the stakeholder?
No

Are you going to take this stakeholder into account?
No

Name of the stakeholder
Egbert Westerhof

How is this stakeholder affected?
DIFFER

Did you consult the stakeholder?
No

Are you going to take this stakeholder into account?
No

Name of the stakeholder
Marco de Baar

How is this stakeholder affected?
DIFFER

Did you consult the stakeholder?
No

Are you going to take this stakeholder into account?
No

Name of the stakeholder
Andries Lohmeijer

How is this stakeholder affected?
Kitt Engineering

Did you consult the stakeholder?
No

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Are you going to take this stakeholder into account?

No

Name of the stakeholder

Emma Roemeling

How is this stakeholder affected?

Kitt Engineering

Did you consult the stakeholder?

No

Are you going to take this stakeholder into account?

No

Name of the stakeholder

Kirtan Patel

How is this stakeholder affected?

Previous designer

Did you consult the stakeholder?

Yes

Are you going to take this stakeholder into account?

Yes

Did you consider all stakeholders, even the ones that might not be a user or target group, but still might be of interest?

-

Now that you have thought hard about all stakeholders, what improvements would you like to make? List them below.

This question has not been answered yet.

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Data

Is data in your technology properly used?

This category is not applicable for this technology.

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Inclusivity

Is your technology fair for everyone?

This category is not applicable for this technology.

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Transparency

Are you transparent about how your technology works?

This category is only partial filled.

Is it explained to the users/stakeholders how the technology works and how the business model works?

yes

If the technology makes an (algorithmic) decision, is it explained to the users/stakeholders how the decision was reached?

yes

Is it possible to file a complaint or ask questions/get answers about this technology?

yes

Is the technology (company) clear about possible negative consequences or shortcomings of the technology?

yes

Now that you have thought hard about the transparency of this technology, what improvements would you like to make? List them below.

This question has not been answered yet.

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Sustainability

Is your technology environmentally sustainable?

This category is only partial filled.

In what way is the direct and indirect energy use of this technology taken into account?

How many printing iterations we make

Do you think alternative materials could have been considered in the technology?

no

Do you think the lifespan of the technology is realistic?

yes, for tungsten

What is the hidden impact of the technology in the whole chain?

none

Now that you have thought hard about the sustainability of this technology, what improvements would you like to make? List them below.

This question has not been answered yet.

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Future

Did you consider future impact?

This category is only partial filled.

What could possibly happen with this technology in the future?

It will be a benefit for humanity if it works in the reactor

Sketch a or some future scenario (s) (20-50 years up front) regarding the technology with the help of storytelling. Start with at least one utopian scenario.

if the fusion reactor works, and this waveguide contributes to it, we will have a highly sustainable system that can generate a lot of power

Sketch a or some future scenario (s) (20-50 years up front) regarding the technology with the help of storytelling. Start with at least one dystopian scenario.

This question has not been answered yet.

Would you like to live in one of this scenario's? Why? Why not?

yes because we will have more energy

What happens if the technology (which you have thought of as ethically well-considered) is bought or taken over by another party?

its good

Impact Improvement: Now that you have thought hard about the future impact of the technology, what improvements would you like to make? List them below.

This question has not been answered yet.