

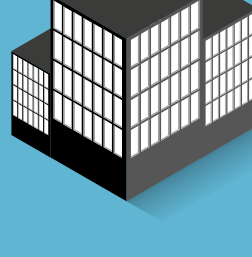
WHY COLLABORATE INTERNATIONALLY ONLINE?

Online collaboration at an international level enhances the quality of education. It offers space for more depth and specialisation. Collaboration saves costs, increases the institution's appeal and makes knowledge possible on a greater scale. Why would you limit yourself to the institution or country borders if, technically speaking, there were no further hindrances?



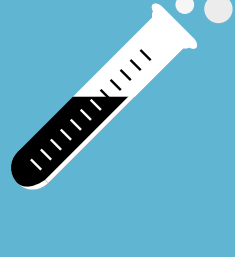
STUDENTS

Get in touch with international lecturers and students in your field. Strengthen your career perspectives. Work towards an international future.



EDUCATION INSTITUTIONS

Broaden the courses that you have on offer. Improve the quality of education. Increase international appeal. Keep smaller courses profitable. Invest in large-scale research.



RESEARCHERS

Analyse, visualise and interpret big data at the same time as colleagues all over the world.



COLLABORATIVE ORGANISATIONS

Work efficiently, safely and simply on cross-border issues.

LEARN MORE

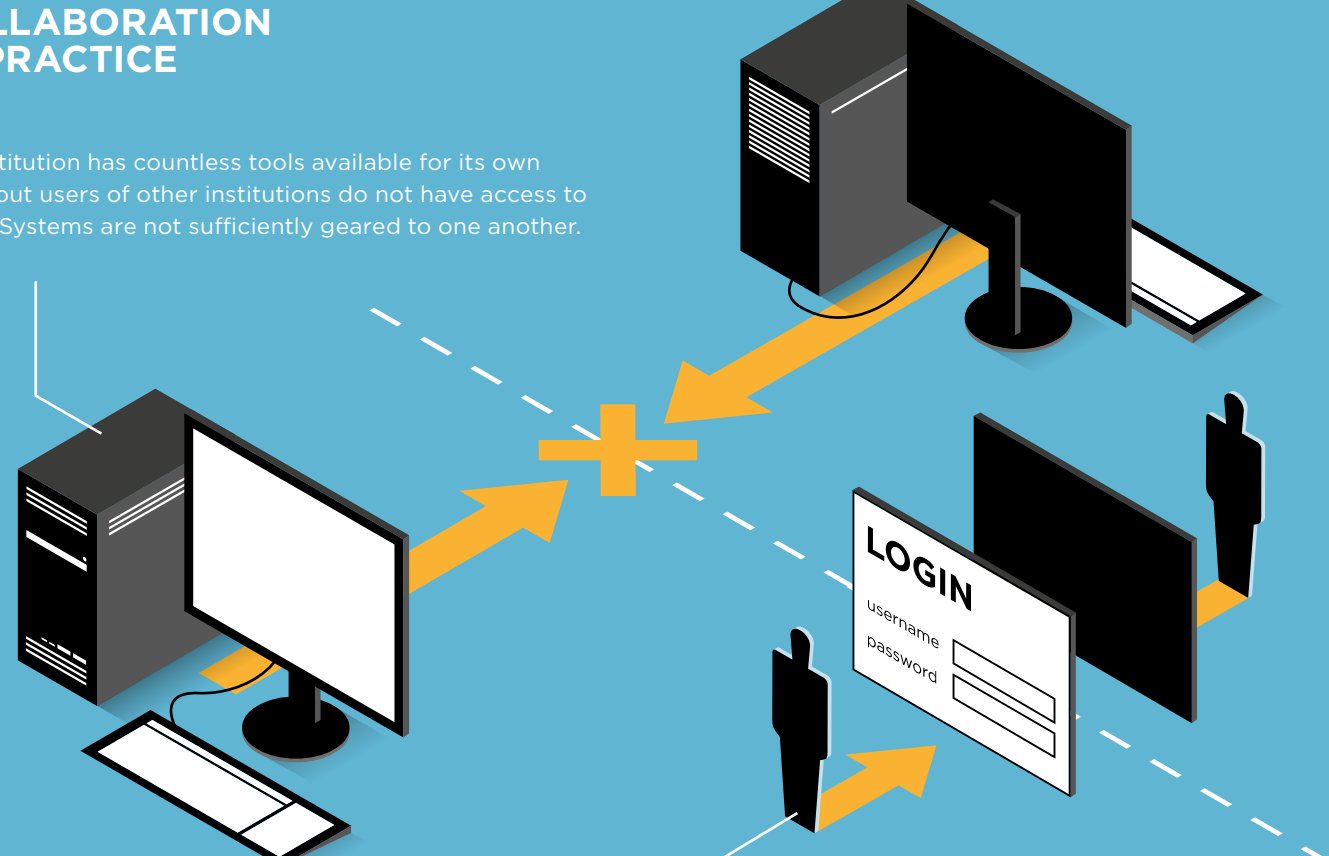
INNOVATE MORE

EXPERIMENT MORE

INTERACT MORE

COLLABORATION IN PRACTICE

An institution has countless tools available for its own users but users of other institutions do not have access to them. Systems are not sufficiently geared to one another.

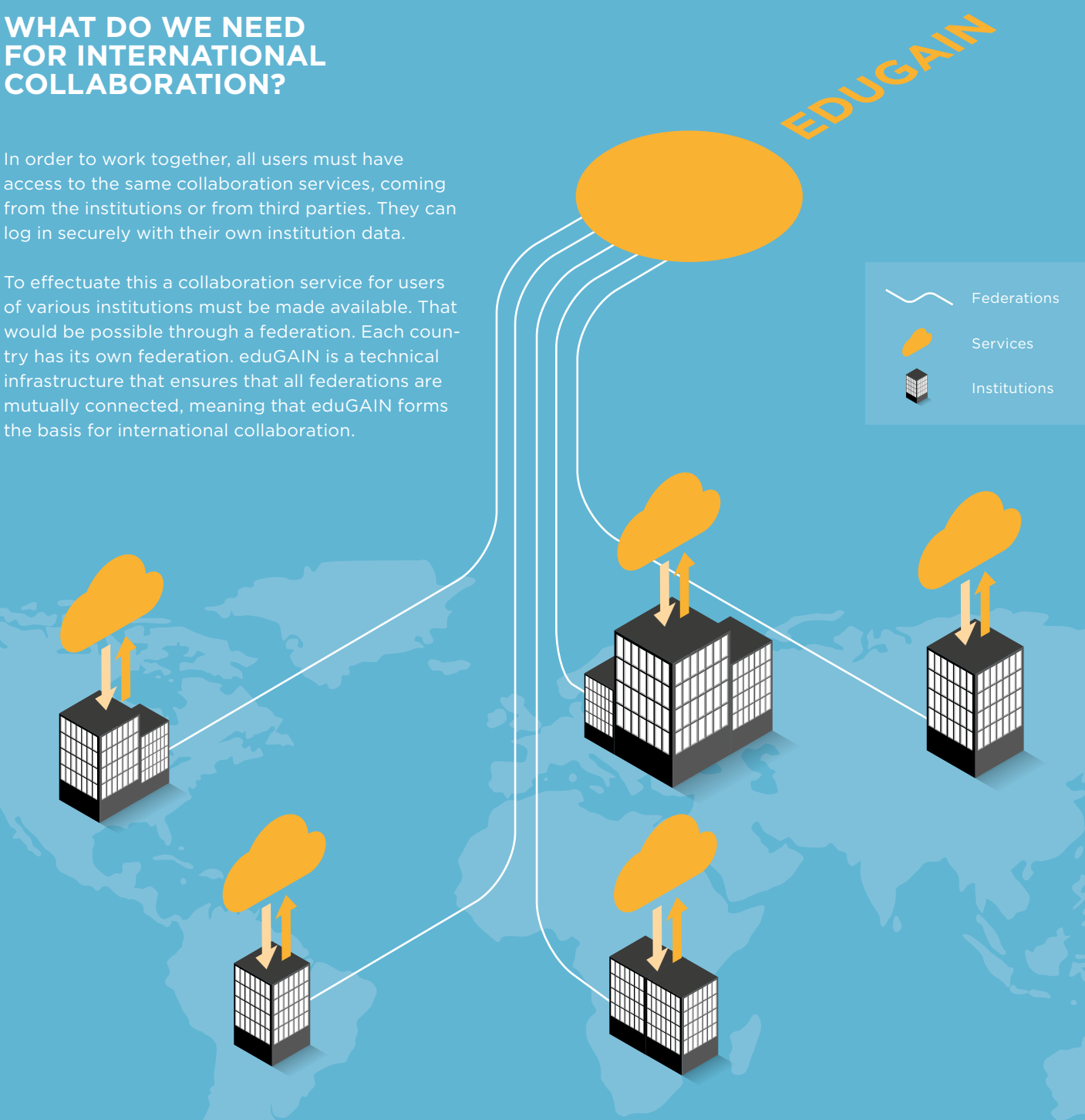


In order to be able to work together institutions are forced to set up labour-intensive workarounds and keep double records, which is not an optimal situation.

WHAT DO WE NEED FOR INTERNATIONAL COLLABORATION?

In order to work together, all users must have access to the same collaboration services, coming from the institutions or from third parties. They can log in securely with their own institution data.

To effectuate this a collaboration service for users of various institutions must be made available. That would be possible through a federation. Each country has its own federation. eduGAIN is a technical infrastructure that ensures that all federations are mutually connected, meaning that eduGAIN forms the basis for international collaboration.



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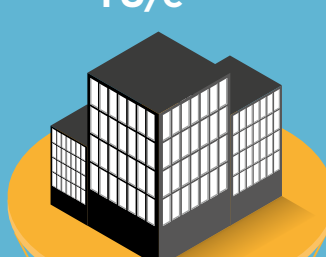
✓ **DOS**

- Manage the online international collaboration as a project: it is very important to have a project leader and an overview of activities and planning
- Involve all relevant stakeholders from the start, e.g. when writing the proposal
- Invest in communication with the necessary parties
- Assess the 'maturity' in Federated Identity Management of the institutions involved, the Service Providers and the NRENs
- Make sure you have enough technical and other resources to get the online collaboration up and running

✗ **DON'TS**

- Don't assume everyone is on the same page about desired functionality
- Don't think everyone has the same technical knowledge
- Don't assume everybody sees the benefits immediately
- Don't consider the technique as the solution to everything. You will also need to think about processes, legal agreements, communication and informing the end users and so on
- Don't regard testing as optional; testing connections is crucial

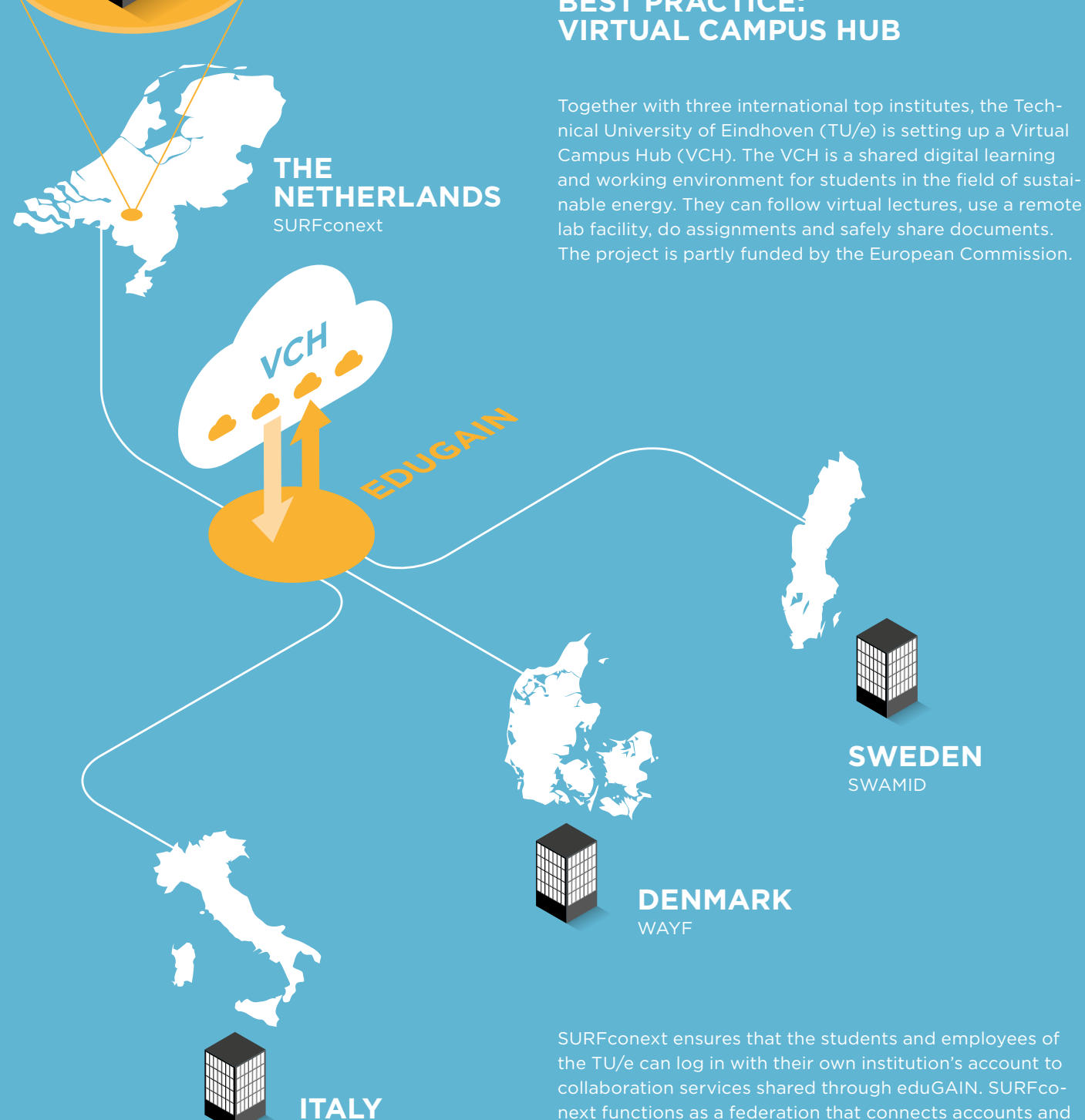
TU/e



THE NETHERLANDS
SURFconext

BEST PRACTICE: VIRTUAL CAMPUS HUB

Together with three international top institutes, the Technical University of Eindhoven (TU/e) is setting up a Virtual Campus Hub (VCH). The VCH is a shared digital learning and working environment for students in the field of sustainable energy. They can follow virtual lectures, use a remote lab facility, do assignments and safely store documents. The project is partly funded by the European Commission.



ITALY
IDEM GARR

DENMARK
WAYF

SWEDEN
SWAMID

SURFconext ensures that the students and employees of the TU/e can log in with their own institution's account to collaboration services shared through eduGAIN. SURFconext functions as a federation that connects accounts and services with one another.

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In this 'proof of concept' 5 types of applications have been developed and tested for online teaching in VCH. All apps are now being connected through the VCH Portal.

- 3** remote labs
- 2** examination tools
- 3** online courses
- 1** start up for entrepreneurs
- 1** collaboration environment

AT 9 VIRTUAL EVENTS
the apps were tested in real teaching situations.

500 STUDENTS AND 25 TEACHERS
tested the applications.

The Virtual Campus Hub project has received funding from the European Union's Seventh Framework Programme (FP7 2007-2013) for Research and Technological Development under grant agreement no. 283746.