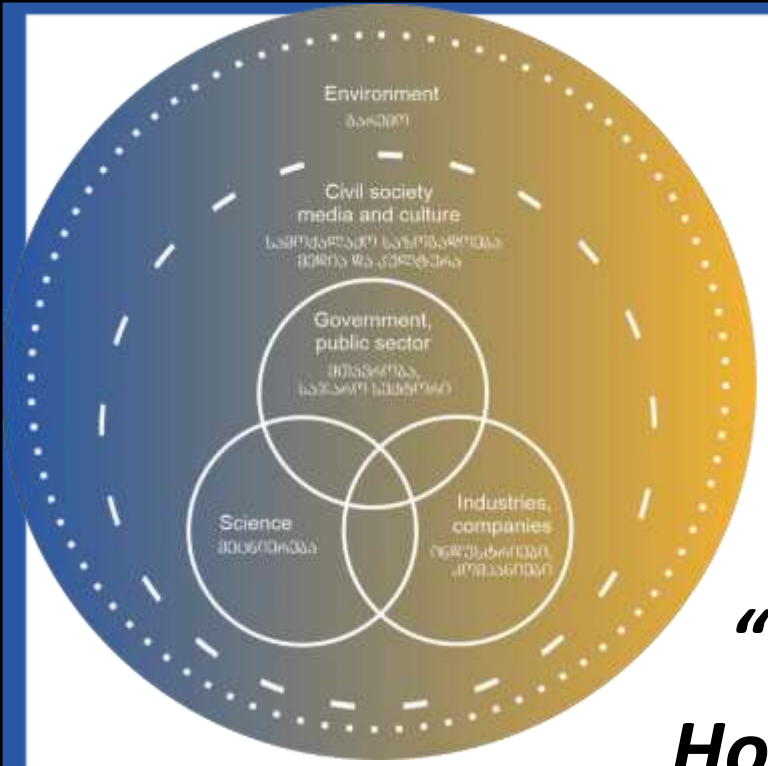

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Project funded by the European Union

TWINNING

EU ENI East Twinning project
Supporting inter-sectoral collaboration possibilities between
Research and Industry
GE 18 ENI OT 02 19

Training for Grant office representatives:

"Training on science networks – How to merge profiles of scientists"

20 April 2022, 12-14h Tbilisi time (10-12h CET)

science KNOW

by Gilbert Ahamer et al.,
Environment Agency Austria
Twinning Component 4 on communication

business GROW

umweltbundesamt
ENVIRONMENT AGENCY AUSTRIA

JOANNEUM RESEARCH

FWF
Der Wissenschaftsfonds.

DLR Projektträger

FFG
Promoting Innovation.

Structure

This training includes
3 lecture units followed by
3 interactive work units:

① ① ② ② ③ ③

Introduction to Section ①

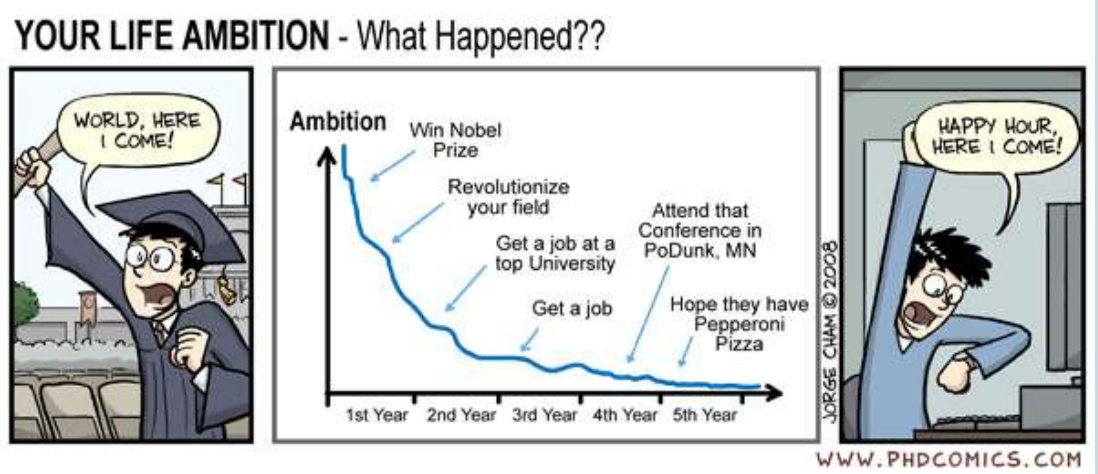
Criteria and skills
(i) for successful scientists and
(ii) for becoming part of international consortia

Slides by *Inese Gavarāne*, Resident Twinning Adviser RTA
and *Wolfgang Polt*, Twinning Project Leader

Profile of famous & successful scientist

Slide by Inese Gavarāne, Resident Twinning Adviser RTA

- open-minded and flexible – involvement in state and private sectors
- write papers and proposals
- communicate with a variety of audiences
- educate others
- keep an attitude of service towards the population
- take responsibility for investigations and actions
- effective communicator
- they can combine work and private life



In front of attempts to take away our enthusiasm …
WE HAVE TO KEEP OUR *TEMPO* !

Skills are important

Slide by Inese Gavarāne, Resident Twinning Adviser RTA

- Develop your own research ideas: actively develop your talent
- Think about context: scientific and societal relevance
- Feasibility of research
- Realistic planning of a project
- Project formulation and planning

Think about future!

What should your track record should look like:

- Publications
- Patents
- Grants/awards
- International experience or activities
- Network: scientific and industrial/societal
- Dedication level

Number of publications and impact factors are easy to quantify...

“the paper” is the currency of science

Thinking ‘I can do better’ can improve performance

How to become (and remain) part of international consortia

Slide by Wolfgang Polt, Twinning Project Leader

- **Be visible on the international scene** – at conferences, in (professional) social media (ResearchGate, Academia, LinkedIn, …), with a good (personal, institutional) home page
- **Be attentive** – follow the international tenders and calls for proposals very closely (best: urge your institution to set up regular screening of international calls and good internal communication; e.g. for Horizon Europe)
- **Read the call text very carefully** – they are often ambiguous and need interpretation. Communicate intensely with your partners and make sure you have a common understanding before elaborating the proposal
- **Be prepared for the cumbersome part(s)** – most international projects involve a good deal of admin and paper work. You will not be well-regarded by your partners if you are the one who does not deliver in time and flawlessly. If you want to lead (large) projects make sure your institution has the capacity to support you (→ Twinning with SRNSFG should enhance this capacity)

How to become (and remain) part of international consortia

Slide by Wolfgang Polt, Twinning Project Leader

- **Be reliable** – consortia of projects often establish a longer lasting collaboration of partners in varying combinations. You will not be asked again if you turn out to be an unreliable partner missing deadlines and failing to provide inputs of high quality

Once you have become visible and experienced:

- **Be proactive** – don't (only) wait to be invited, approach potential partners proactively ("Hey, we have a really interesting research idea/approach…")
- **Make sure you are part of the Steering fora of the project** to have a say on the direction and to best place your interests

Sustained (i.e. on a broad scale and in the long term) success can only be achieved if **individual, organizational and systemic capacities reinforce each other:** as an individual scientist you need supporting institutions and a well-functioning 'research & innovation system'. Hence you have an interest in helping to establish such a setting!

Let's put ourselves in the **shoes** of the scientists you are supporting!

Section ①:

Ingredients for a successful network: mindsets, targets, partners, institutions

Gilbert Ahamer, Twinning Component 4 Leader

… we look from inside out …

1. Mindset
2. Human
3. World

Starting point: what we create in our imagination => reality

mindset => real world

1. Create at first your ideal mindset, values & motivation

imagine => manifest!

2. Define your personal targets ⇧ = arrows, directions
3. Conceive your ideal personal partners ✚ = plus signs, assets
4. Conceive your ideal partner institutions ✖ = multipliers

1-4: Equilibrium of what you give them and what they give you:

Ingredient number one for any scientific network: mindsets

Possible mindsets:

1. Improve your *inspiration* received from international practice
2. Increase your *methodologies* by professionalising them internationally
3. Widening your *background* understanding by including dissenting views
4. Strengthening your *publications* by co-authorships & better writing style
5. Enlarging your *reaching-out* by enlarging the public for your findings.

*These motivations mean **quantifiable targets** in several dimensions:*

science production

1. *Conceptual* inflow
2. *Methodical* soundness
3. *Contextual* framing
4. *Products'* outflow
5. *Resulting* outreach

Write down *your* mindset 1

Write down *your* mindset 2

Write down *your* mindset 3

Write down *your* mindset 4

Write down *your* mindset 5

Georgia

Interactive work ①:

Possible mindsets:

“5 Ingredients for a successful network”

for a concrete team that you envisage

(10 min.)

Let's put ourselves in the **shoes** of the scientists you are supporting!

Section ②:

Define and analyse profiles of scientists

Gilbert Ahamer, Twinning Component 4 Leader

Our mathematical formula (☺)

person = f (target)

your network's "ideal" partner person = f (*your* network's target)

“person = f (target)”: Converting targets into persons

When you see these (or rather your team’s) targets – how do they translate into finding suitable persons?

1. *Conceptual* inflow

… who can inspire you?

Imagine *your* ideal partner for target 1

2. *Methodical* soundness

… who can improve your research methods?

Imagine *your* ideal partner for target 2

3. *Contextual* framing

… who brings you into better (societal) context?

Imagine *your* ideal partner for target 3

4. *Products’* outflow

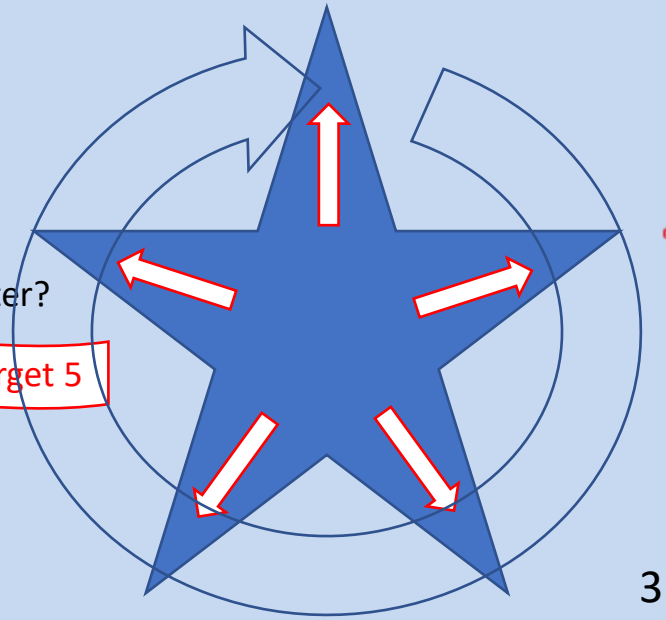
… who brings you into better (societal) context?

Imagine *your* ideal partner for target 4

5. *Resulting* outreach

… who allows you to be known better?

Imagine *your* ideal partner for target 5



Converting targets ⇑ into persons ✚

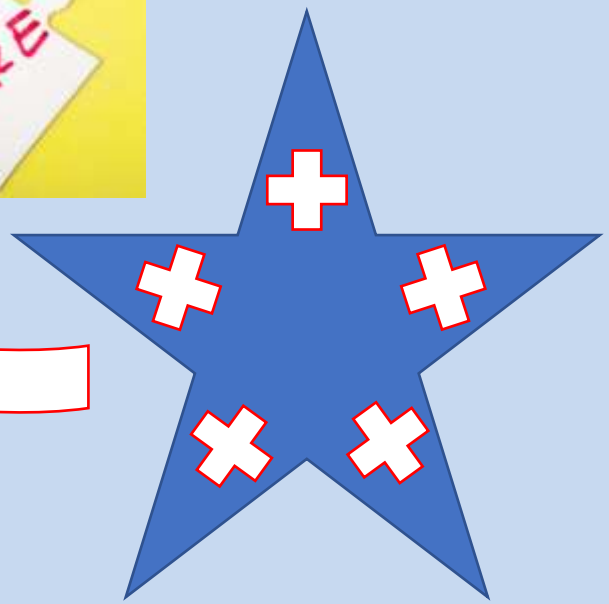
idealised

When you see these (or rather your team's) targets – how do they translate into finding suitable persons?

1. *Conceptual* inflow

… select an inspirer …

How *you* approach person 1



2. *Methodical* soundness

… select a methodologist …

How *you* approach person 2

3. *Contextual* framing

… select a contextualiser …

How *you* approach person 3

4. *Products'* outflow

… select an implementer …

How *you* approach person 4

5. *Resulting* outreach

… select an outreacher …

How *you* approach person 5

Today's sequence of envisaged entities:

Targets => persons => institutions

your "ideal" institution = f (*your* target)

Converting **persons** into **institutions**

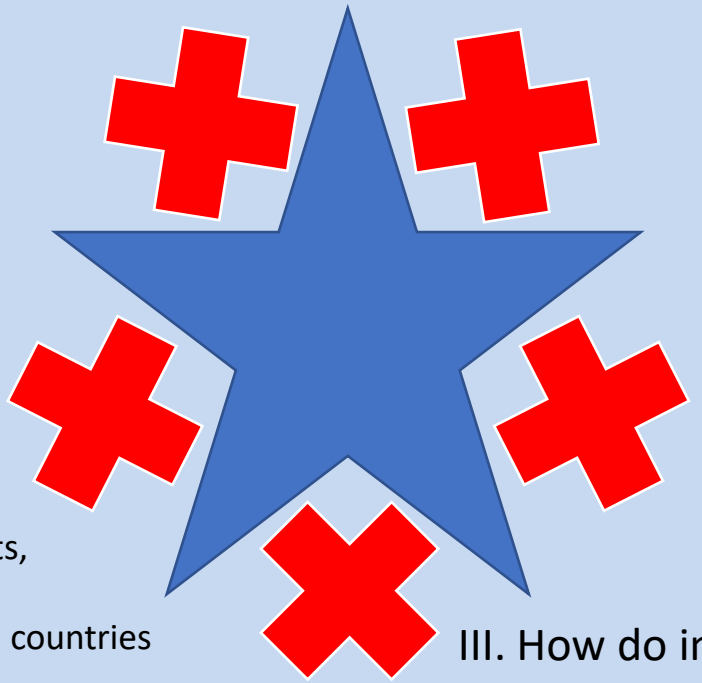
Institutions serve as a ***framing structure*** that allows individuals to ***act***

V. Which result is appropriate for which *payment*?

… minimum daily rates can hinder cooperation

I. Are institutional *concepts* similar? What is considered "progress" for an institution?

… research, administration, consulting, strategy development



IV. What type of *result* brings an institution forward?

… MoU, publications, books, curricula, concepts, policy reports, industrial products, hardware, software, relative attractiveness of cooper. countries

II. Do institutions esteem similar *methods*?

… experimental or theoretical, literature analysis, philosophy; mono- vs. trans-disciplinarity

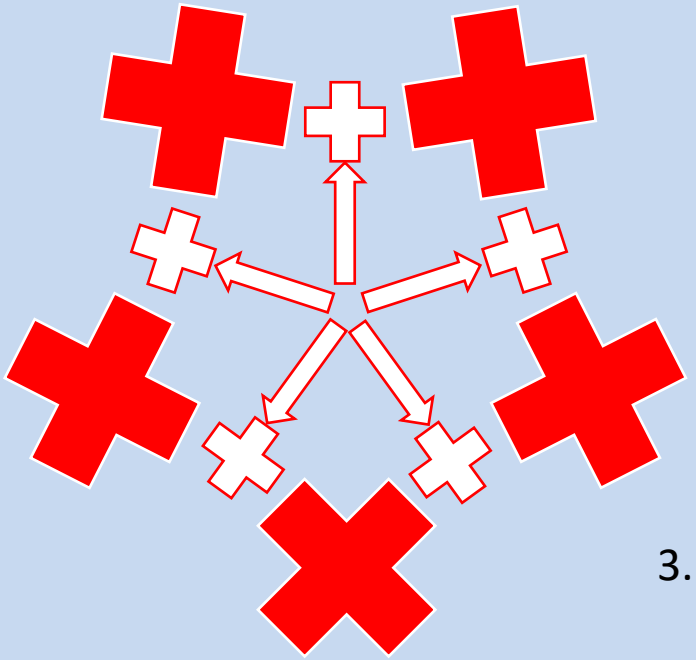
III. How do institutions *function* internally & administratively?

… vertical vs. horizontal authority flow, (un)limited sovereignty

The overall image: targets ⇧ => persons ✚ => institutions ✖

Our “meta-map”:

1. *Conceptual* inflow



2. *Methodical* soundness

3. *Contextual* framing

4. *Products’* outflow

5. *Resulting* outreach

“⬠” means five dimensions for success

“+” means symbiosis, synergy

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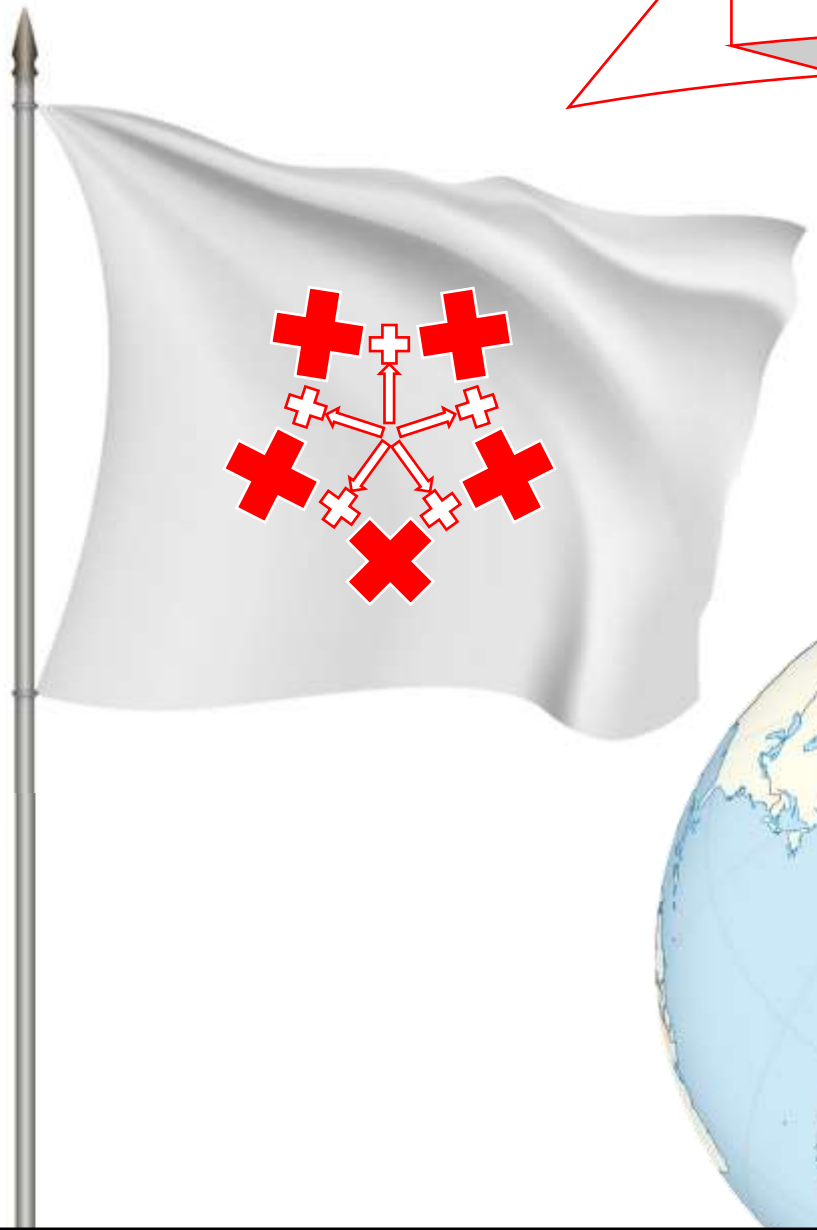
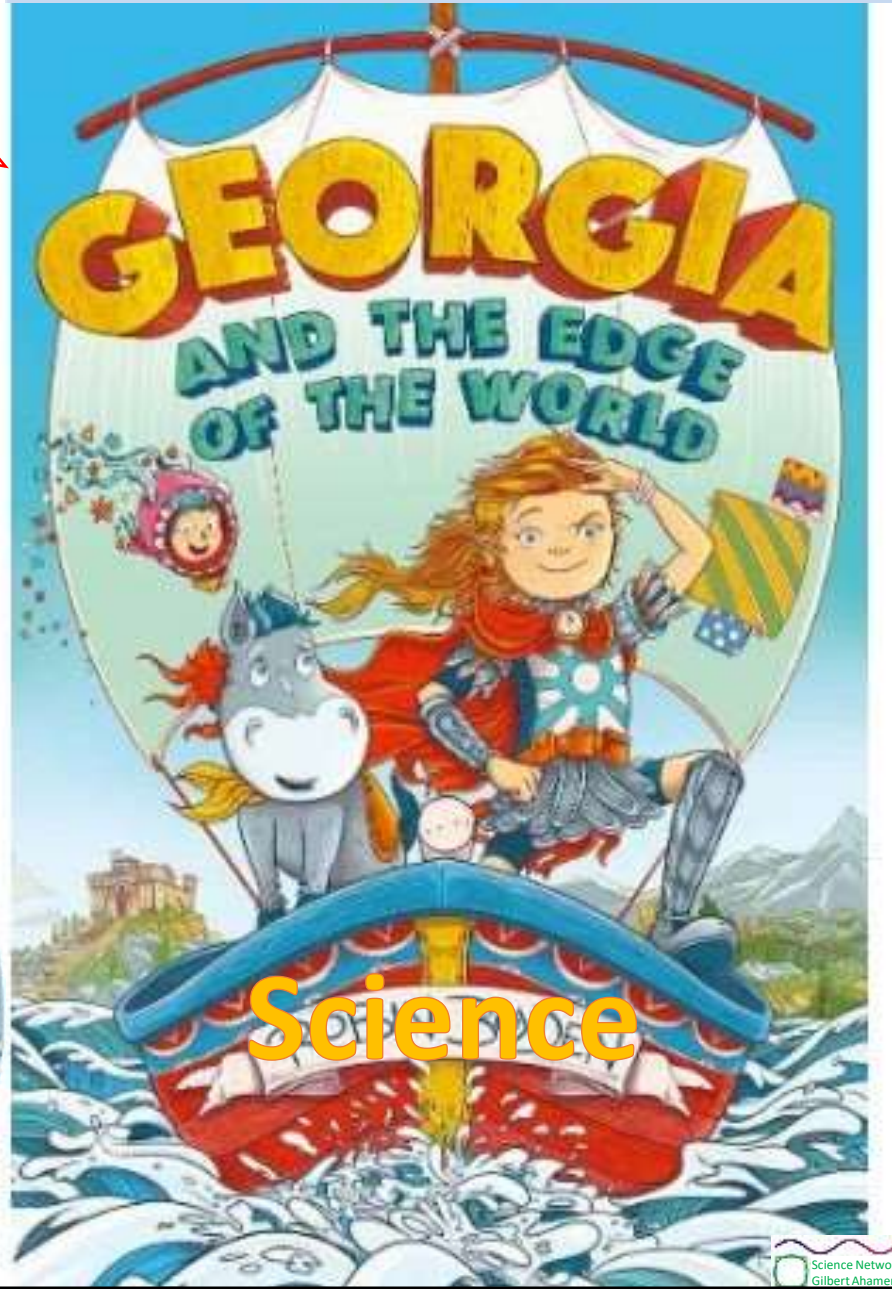
TWINNING

follow your carrier
follow your *bliss*

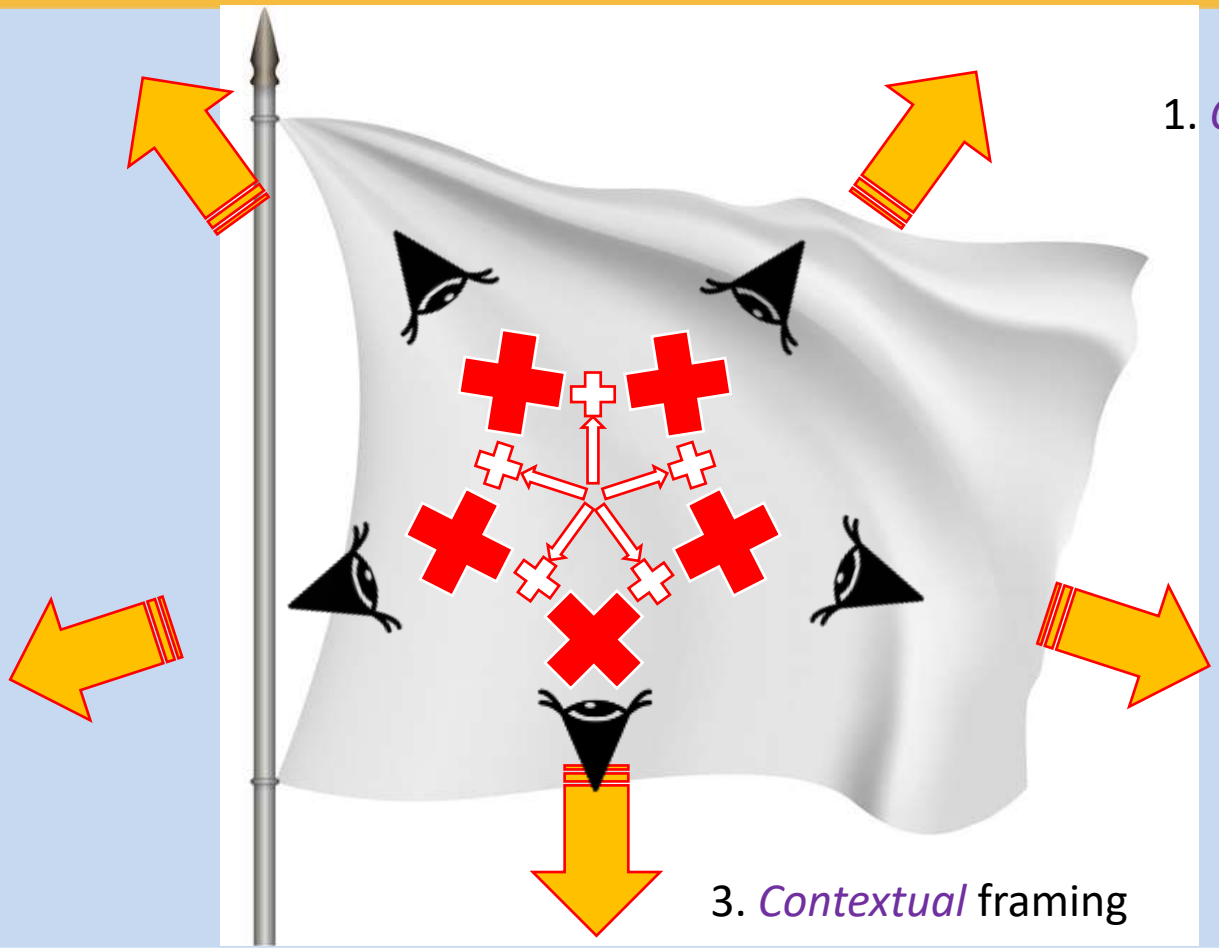
EU Twinning in Science-Business links





How to prepare yourself? - increase *your* capacity to *give*

5. *Resulting* outreach



1. *Conceptual* inflow

NOT *only* repeat how great you are in your *own view*, but perceive how useful and attractive you are in *your partners' views*!

2. *Methodical* soundness

4. *Products'* outflow

3. *Contextual* framing

Interactive work ②:

How do these 5 mindsets translate into finding suitable targets, partners, and institutions?

for a concrete team that you envisage

(10 min.)

⑥

Section ③:

How to give relevant recommendations to scientists?

Gilbert Ahamer, Twinning component leader

Our meta-flag means:

- The procedures of network-building
- The 3 circles of equilibrium & harmony
- Created by 3 constructions of consensus
- Using this logo:

Therefore, your task of creating a network translates to creating equilibrium on all levels from all outside perspectives!

=> Switch perceptions: from *your* perceptions towards your *partners*' perceptions!

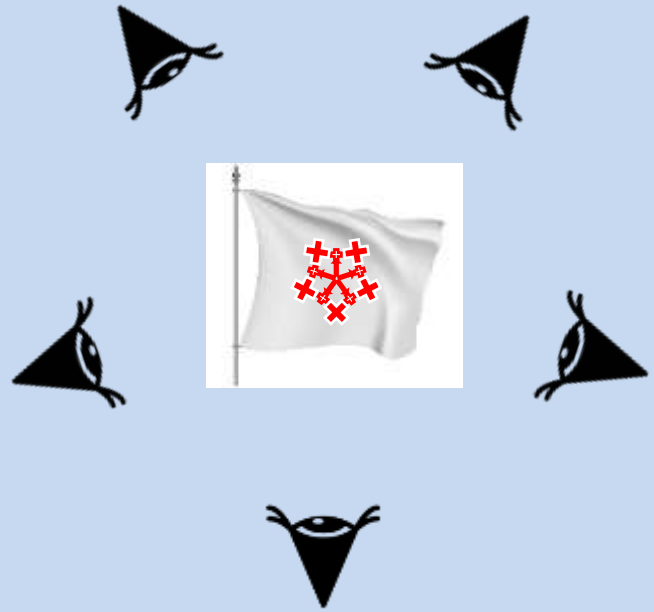
The dimensions of how others may see you

Some examples:

1. You provide a method
2. You provide data
3. You come from a “useful” country
4. Your institution is well-known
5. Within the institutional landscape, you represent a missing role
6. e.g.: “important names” need “diligent workers” … … …

Let us slowly approach this huge task: optimise how *others* see *you & your team*

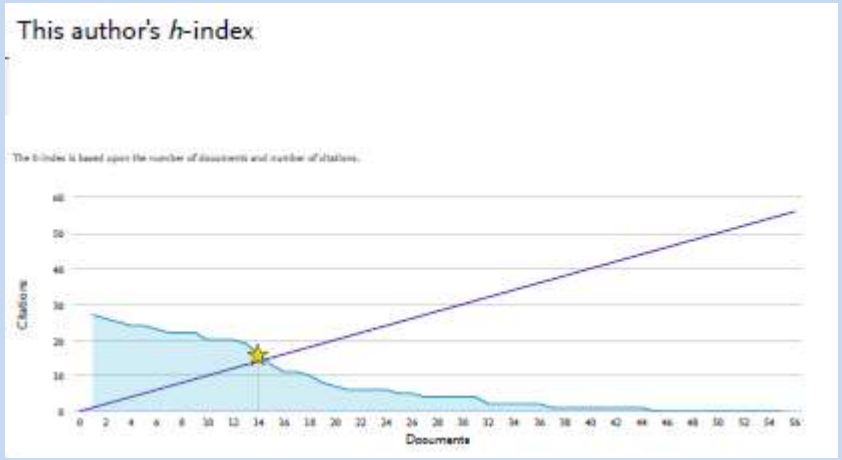
One option out of many – widely accepted:

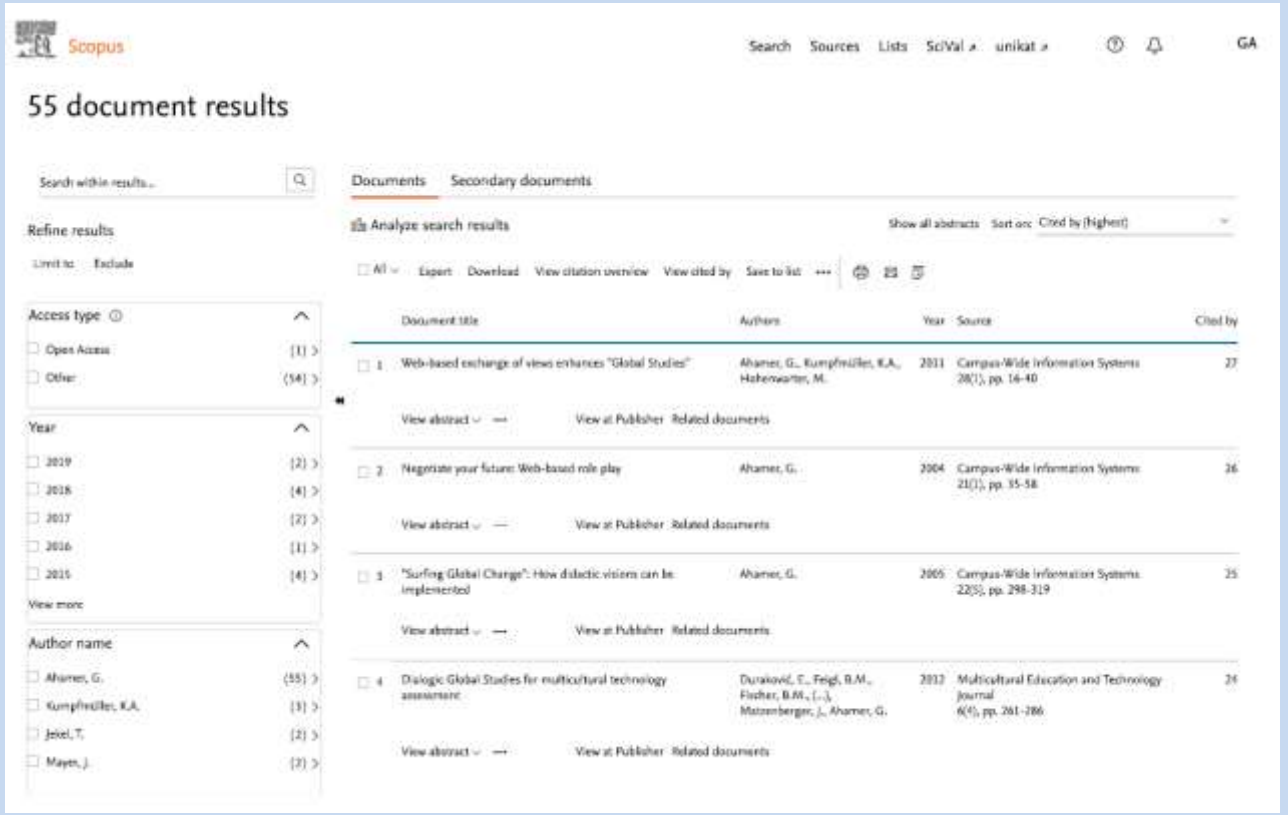


1. Search for "objective" indicators of your "qualities" (if ever possible)
2. Try to use internationally recognised journals to document your achievements
3. Select form *Scopus-listed* journals …
4. … or, if achievable, from *WoS-listed* journals
5. From your universities' premises – or via a VPN (virtual private network),
6. Use these sites: scopus.com, webofknowledge.com, webofsciene.com

Example of Scopus

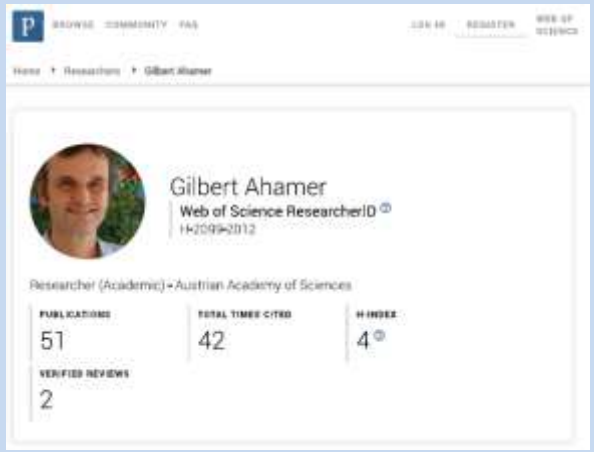
- Scopus: Includes the “best” 20,000 journals worldwide
- You may link to the pdf …
- … in case your uni bought the journal
- Hirsch’s h factor: n public. with n citations
- Also journals & universities have h factors

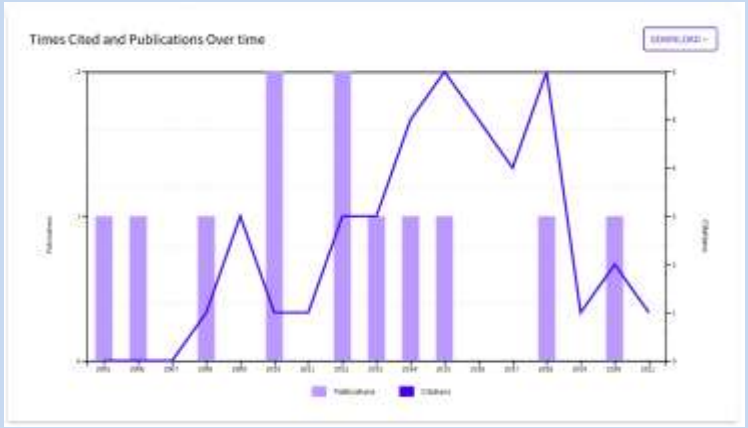




Example of World of Science (WoS)

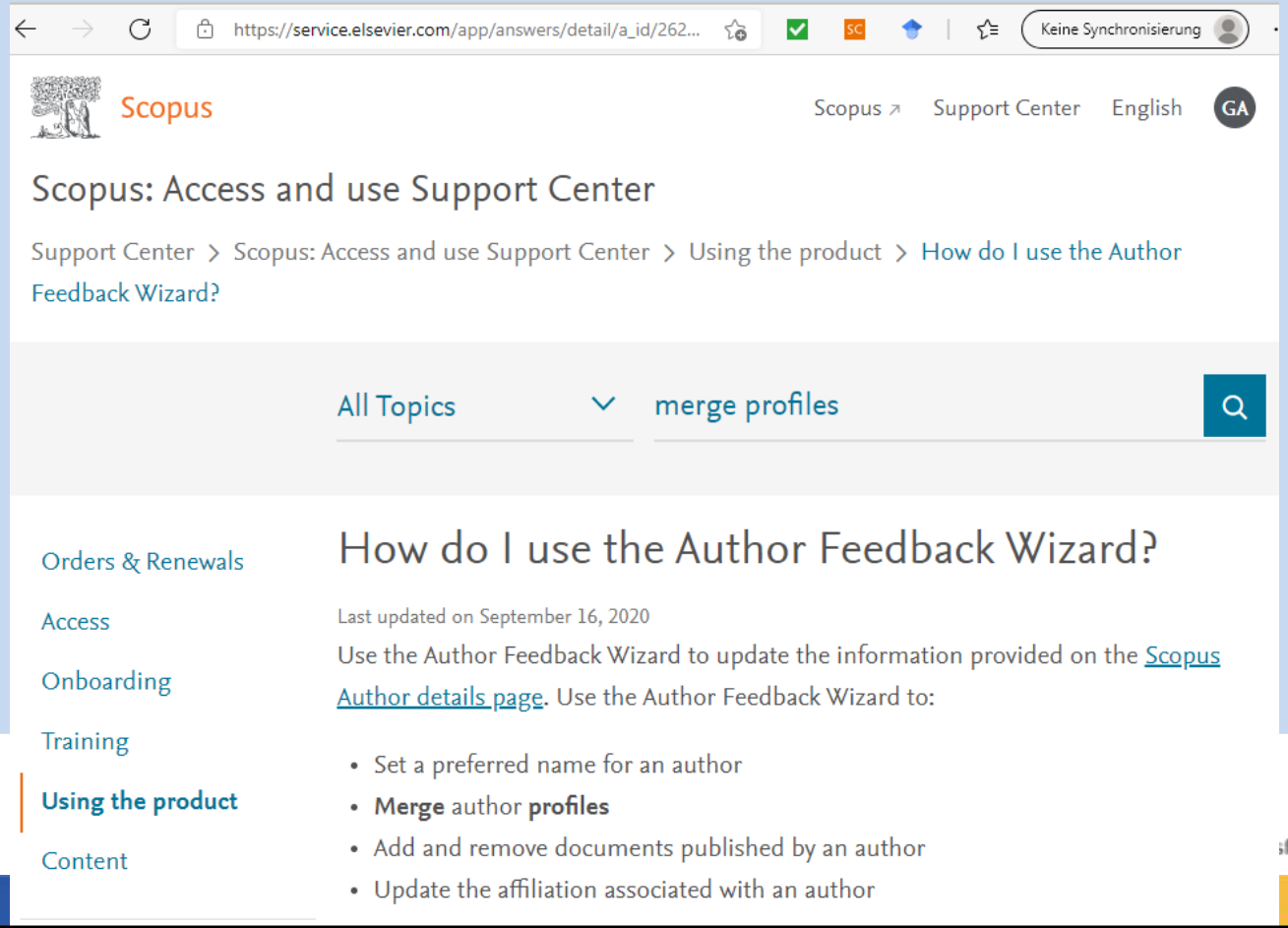
- WoS: Includes the “best” 10,000 journals worldwide
- Similar to Publons





In Scopus, you should merge your profiles

- Often, names or affiliations can be misspelled, especially with non-Latin alphabets:
- In such cases, use the “merge profiles” option

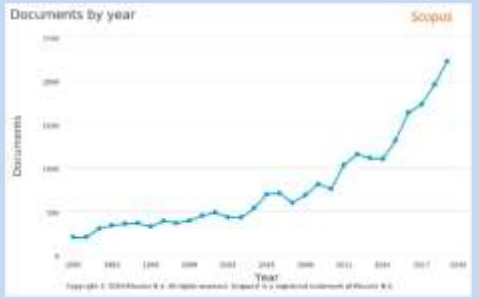


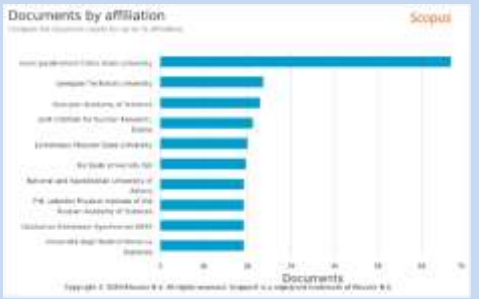
- Always, use the same spelling of institutions!
- Optimally, use the Scopus “author identifier
- …. and the ORCID identifier

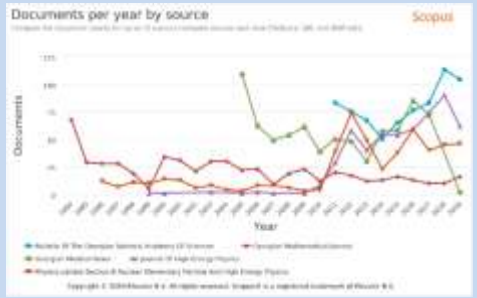
In Scopus, you can group your findings along categories

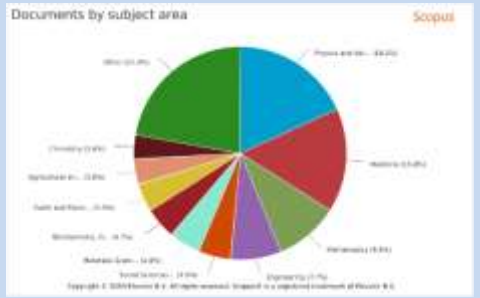
If you select a journal, think of:

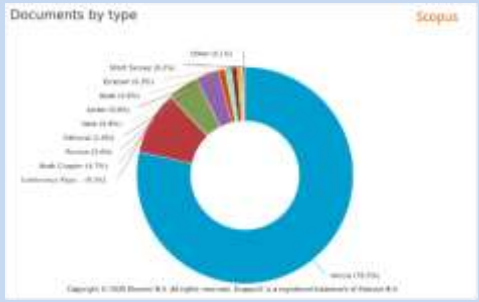
- If it has good impact factor (SJR, SNIP, etc.)
- If you can reach your target to publish in this journal
- If your received reviews have good quality
  – to further improve the quality of your work

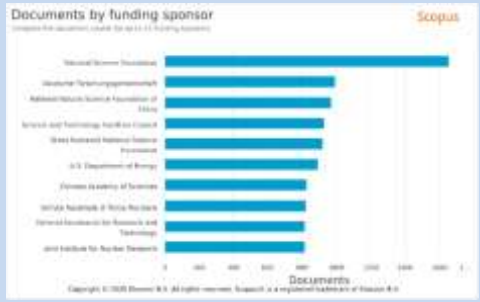








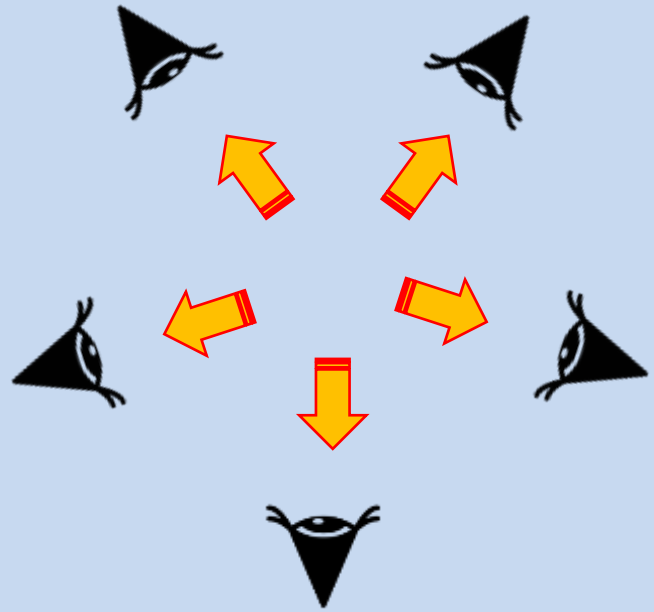


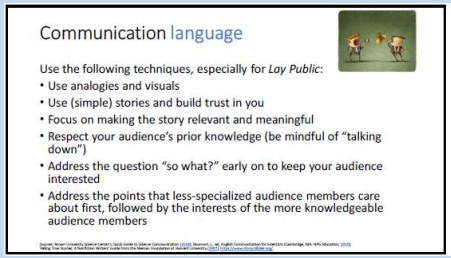


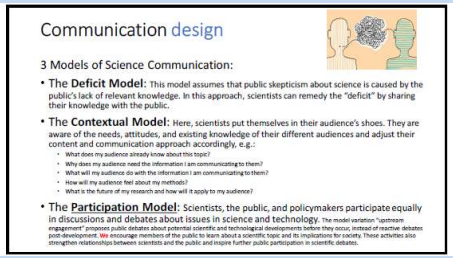
- See my analysis of globalisation journals

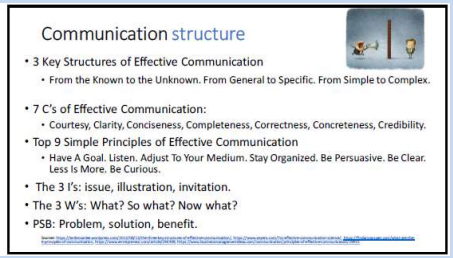
Communicational skills *optimise how others see you*

- Communicate in smooth manner
- Leave chances for the other to “discover” you
- Focus on what you can give
- You may use the “cookbook” from an earlier Twinning workshop in November









How do we communicate science?

Science communication skills: top 9 tips

Make sure you understand what your audience is interested in and adapt your communication accordingly.

1. Understand your audience. Put yourself in their shoes. How your research affects their lives.
2. Build your message. What single idea should they leave the room with? What do you want to achieve?
3. Connect with the public. Why should they care about my work? Convey emotion, make them laugh
4. Tell your public a story. Storytelling humanises scientists. Share a personal or professional anecdote.
5. Talk to journalists. Start by understanding why they care about your research. It's a public service.
6. Make your science understandable. We usually overestimate how familiar audience is with the topic. No jargon.
7. Deal with controversial topics. Expect your public's preconceived ideas. Respect their opinion.
8. Embrace uncertainty. What is true today may not be as accurate tomorrow. Uncertainty excites.
9. Mix communication channels. Articles, conference talks, press, social media, blogs, videos.

Source: https://agentmajeur.com/science-communication/, https://agentmajeur.com/humour-science-presentations/

RecipeBook

Identify your method

The right audience | with the right message | in the right medium | at the right time

- Know your **audience** (e.g., lay public, the media, policy makers, ...)
- Know your **message** (including "So what?" and "Why should I care?")
- Know your **medium** (that I am going to use to communicate my message to my audience)

Communication message

- Once you know your audience, you can develop your message (see Muza).
- Your message should answer the audience's questions like *"So what?"* and *"Why should I care?"* Answers to these questions vary depending on your audience.
- As a science communicator, it is important to *frame* your message in terms that are accessible, relatable, and meaningful for your specific audience.
- Why framing?
  - actively engage your audience with an issue
  - build trust and relationships with the public
  - encourage the public to participate in dialogues about scientific issues.

Communication medium

Options to choose media:

- **Writing about science:** Use active verbs; avoid jargon, euphemisms, clichés, wordplays, and puns; use analogies and examples; only include critical details; create an outline; tell a story but stay true to the facts; spend a lot of time; revising and rewriting; cite your sources.
- **Visualizing science:** Use a consistent style and format; use colors with purpose; use high-resolution graphics; format your graphics and include labels, legends, and captions.
- **Creating a poster:** Remember that your title is your message; be intentional in your choice of colors; use high resolution visuals; use photos for the general public; use conceptual diagrams for the informed public and non-specialist scientists; use supporting visuals even if your audience is scientists in your field; use text to support your visuals; create a handout of the poster.
- **Speaking about science / presentations:** Give yourself plenty of time to prepare and practice; state your message at the beginning and end of the presentation; give your audience background on your topic; focus on the aspects that are most interesting and relevant to your audience and introduce them early on; engage your audience through questions and dialogue; explain your visuals and use them to support your presentation; talk about the process, not just the results; aim to use less time than you are allotted; leave time for questions; based on what you know about the audience, try to predict their questions and prepare answers. If you use slides: spend one to two minutes per slide; each slide should have a visual element; explain your visuals to your audience; include an outline slide.
- **Using social media:** blogs and other social media platforms such as Twitter and Facebook for a variety of purposes.

Interactive work ③:

How can you support “your” teams to prepare themselves to be optimally perceived? What can they GIVE?

(10 min.)

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Project funded by the European Union

TWINNING

EU Twinning in Science-Business links

მადლობა ყურადღებისთვის

Thank you for your cooperation!

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DLR Projektträger

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