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- 2. Three challenges of international landscape analysis**

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# RISCAPE goals

... is to provide **systematic, focused, high quality, comprehensive, consistent and peer-reviewed...**

international **landscape analysis** report ...

on the **position and complementarities of the major European research infrastructures** in the **international research infrastructure landscape**.

# What is landscape analysis?

- **A Landscape analysis is a type of organisational analysis,** where information of the main actors of some specific field are **systematically** collected.
  - In this case the organisations are **Research Infrastructures**
- **Many similarities to the geographical map making:**
  - One needs to select **viewpoints** and **parameters** to map
    - **These affect how the information is perceived**
  - It is important to be **consistent** throughout the analysis
  - **Never perfect** representation of reality





# Differences to some other initiatives

- **RISCAPE Landscape analysis is global – but eurocentric (or ESFRI centric)**
  - Global in the sense that the goal is to map all areas of world (but NOT Europe)
  - Eurocentric in a sense that the analysis concentrates on RIs **complementary** to the ESFRI roadmap RIs
    - I.e. we do not map the whole landscape (i.e. like ESFRI or MERIL do in Europe)
    - RISCAPE concentrates on most likely complementary RIs

# Partners are from domains analysed



# Stages of RISCAPE

2017

- Defining methodology
- Creating Stakeholder interaction
- Engagement of European RIs and clusters (defining int. targets)

2018

- Information collection from international Ris (**ONGOING**)
- Consolidation and quality control (**ONGOING**)

2019

- Finalization and Peer Review
- Dissemination

# RISCAPE EXPERIENCES IN INTERNATIONAL ANALYSIS

(this far...)



# Challenge I : Terminological

## What is a research infrastructure?

# Research infrastructure?

- Even in Europe, the RI definitions differ from source to source
- The term "research infrastructure" is **NOT** used in many countries
  - .. and can be even a *loaded term* in some – thus we needed to define it carefully

# RISCAPE approach

- Our goal was to make an RI landscape usable to ESFRI RIs
  - SOME similarity to ESFRI is needed
- Using the stakeholder panel, literature analysis and domain specialists, we ended up on common "RI" characteristics
  - Longevity over "typical research project"
  - Science orientation
  - Services provided also for non-employees
  - Significance in the field
- Also, we limited some things done outside of RIs out (e.g. satellites, meteorological monitoring..)



© XKCD

# Example



- **NASA in USA**

- Clearly not a typical “RI”, as it is a government agency? Surely not an RI? Even they say that they are not an RI..

## NASA Airborne Science Program



Aircraft open to Transnational Access

**EUFR**  
European Facility  
for Airborne Research



**ATR42 - SAFIRE**

Service des Avions Français  
Instrumentés pour la Recherche  
en Environnement



**ATR72 - SAFIRE**

Service des Avions Français  
Instrumentés pour la Recherche  
en Environnement



**BAe146 - FAAM**

Facility for Airborne Atmospheric  
Measurements  
Atmospheric boundary layer,



**C 207 - FUB**

Freie Universität Berlin, Institut  
für Weltraumwissenschaften  
Troposphere

# Solution for terminology

- **Good *literature analysis* is needed – use the understanding of the field and scientists**
- **Use of *EU-centric* terminology can be very confusing or even lead to misunderstandings**
- **Define terms, and be able to discuss them with the organisations you are working with**

# Challenge II: Unknown unknowns

## How do we find the RIs?

# Finding the RIs (I)

Known unknowns

Using institutional knowledge & stakeholders in different levels



Engaging the ESFRI  
RIs via cluster projects  
*"who does similar things  
than you do internationally?"*



Stakeholder panel & consultations

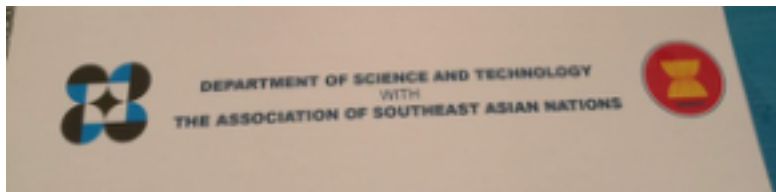


*"Is the list what  
we need?"*

# Finding the RI s (II)

## Unknown unknowns

- **We noticed that some areas in the world did not have much potential RI s in main method**
  - Are there unknown unknowns?
  - Direct top down approach using ministries, etc for information collection – mixed results this far
  - Use of other indirect methods
    - Literature analysis, conferences, rumours...





# Finding international RIs

- **Use institutional knowledge**
- **Ask scientists! They follow the literature**
- **Use domain specialists to communicate**
  - Avoids some of the pitfalls
- **Sometimes top-down is the only way**
  - Very challenging, and results may vary

# Challenge III: Social

**How to make contact?**  
**How we are sure we get the information we need?**

# We all love questionnaires..

- **After a long period of investigating potential use scenarios we ended up with a long list of questions...**

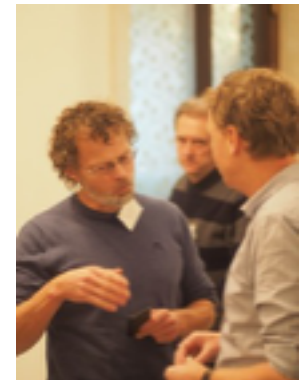
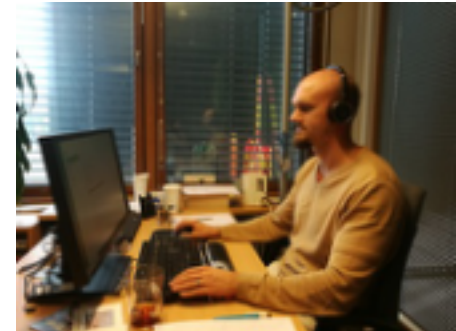
- **Introduction**
- **Basic institutional data**
  - Org name, type, etc.
- **Long term vision**
  - Funding, business plans, directions
- **Focus and mission**
  - Services provided, challenges tackled

- Access to services
  - Quotas, criteria, etc
  - Data policy, licences
- Impact indicators
  - Existence, reports
- Complementarity with EU Ris
- Technical capabilities
- Science challenges
- Ecosystem
  - Dependencies

- **Understandably, just sending them to organisations will not be ideal**

# RISCAPE approach

- **Structured interviews – with a real person asking the questions**
- **Initial contacts points preferably from EU RIs or scientists – personal is often needed**
  - Well planned information package for contact (why, how, when, how long it takes, etc.)
- **Pre-filled answers as much as possible**
  - Limits the time needed
- **Some time for friendly conversation**
  - Avoids misunderstandings
  - Interviewer must have domain expertise
- **Send collected data for confirmation afterwards!**
  - Builds trust
  - Common database -> traceability



# Overcoming reluctance and avoiding misunderstandings

- **Use personal networks if possible**
  - Explain well the framework, benefits, and reason for your contact
- **Try to minimize effort needed from the contact**
- **Have two-way communication**

# Take home messages

- **Even mapping International RIs can be challenging from many perspectives**
  - Terminology needs to be well defined – but flexible if needed
  - Finding connections: User experiences, "knowledge in the organisations"
  - Personal contacts are the best way – use of connections and introductions help to build trust

# Project info and contact

- Horizon 2020 project
- 2017-2019
- Coordinated by U. Helsinki, Finland

[www.riscape.eu](http://www.riscape.eu) @ri\_landscape

Coordinator

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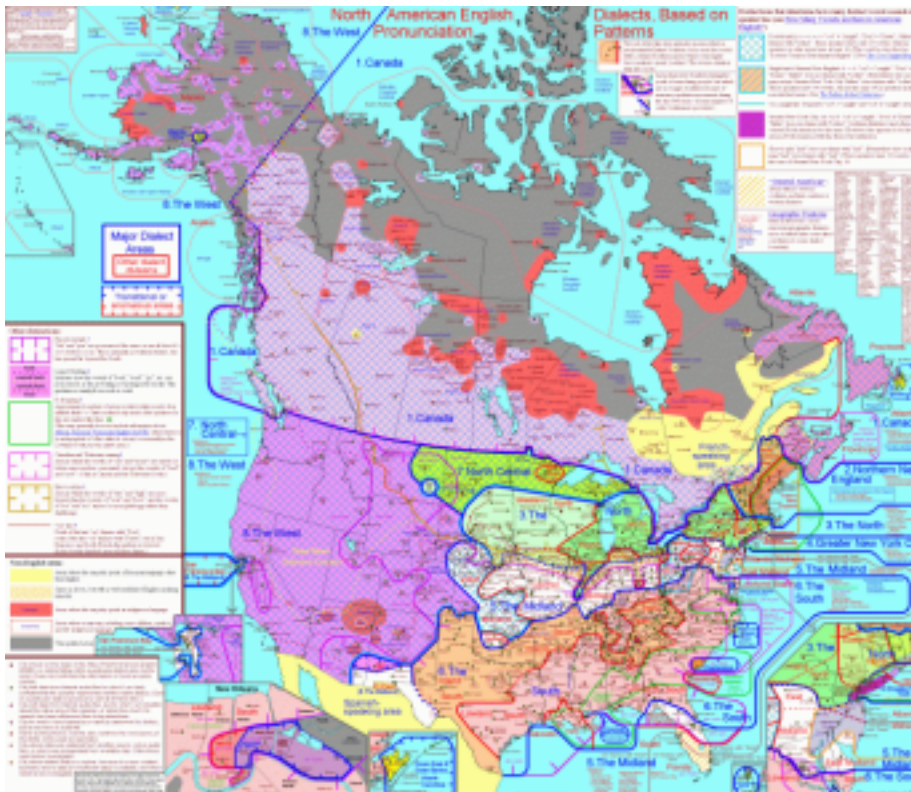
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# What to collect?

Too much?



Too little?

X

You are here



# The goal is to find collaboration partners -> complementarities

