



NUCLEUS

D4.8 Working Group Report 1

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List of Recipients:

- NUCLEUS Executive Board
- Project Officer via participant portal
- All consortium members (open access)



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1. Introduction

1.1 The NUCLEUS Working Groups

NUCLEUS is a Horizon 2020 funded project which focuses on embedding sustainable Responsible Research and Innovation (RRI) within the governance structures of Higher Education Institutions across Europe. RRI is a term adopted by the European Commission whereby societal actors work together throughout the research process in an effort to better align and meet the current and anticipated needs, values and expectations of society. It focuses on the topics of gender, education, open access, ethics and governance issues in the development of scientific research.

Based on empirical data and practical experiences gained a) in an interdisciplinary study and b) in field trips related to the 6 reference frameworks inside and outside academia, NUCLEUS will develop and apply a common methodology for collecting and describing best practice

activities and existing strategic approaches of universities and related partners which support or effectively conduct RRI. In a collaborative capacity building process, consortium partners will outline the challenges and potential barriers for embedding RRI activities in academic and non-academic institutions.

In addition to the interdisciplinary study and the field trips, a number of thematic **Working Groups** will be organized during the NUCLEUS project timeline. These interdisciplinary meetings will reflect first results of the empirical study and “lessons learned” from the NUCLEUS Field Trips. In a cooperative mode participants will develop suggestions on how to adapt existing systemic approaches and cultural activities to different socio-cultural and political settings. Based on these suggestions and the experiences and results of completed or ongoing European programs, the partners will develop an applicable RRI Implementation Roadmap, which will be the basis for the 10 embedded and 20 mobile NUCLEI. The Working Groups will continue to be conducted as part of Work Package 4, led by Aberdeen University.

1.2 Work Package 4 – Capacity Building and RRI Recommendations

Work package 4 will conduct a collaborative mutual learning process to provide standardised and comparable documentations and analysis of existing RRI-related activities inside and outside academic communities in Europe, China, Russia and South Africa. In addition to capacity building and best practice analysis the aim of this work package is to feed a diverse mix of academic and socio-cultural experiences into the RRI Implementation Roadmap for subsequent use in the NUCLEI test sites.

WP 4 will be led by the University of Aberdeen which, as part of the Research Councils UK Catalyst Network, has considerable experience of embedding institutional change around responsible research approaches. In addition to the University of Aberdeen as the lead partner, work package 4 will also feature two other renowned universities with high-level

expertise in the fields of public engagement, governance and cultural change: Dublin City University and the University of Edinburgh.

After developing a common methodology and approach the three university leads will supervise the sub-groups, which contain institutions and organisations covering different countries and cultures, and will perform the following tasks: a) Moderate working groups and video-conferences to develop RRI criteria and drafts for possible action plans referring to the relevant reference framework. b) Coordinate and organise capacity building field trips to selected Consortium Partners referring to the relevant topics.

2. Working Group London 16 March 2016

2.1 Agenda and Topics of Discussion

Location:

London School of Economics – LSE Library
LRB (Lionel Robbins Building), 5th floor, 5.05

Attendees:

- Anne Dijkstra, University of University of Twente
- Stefan Fuchs, Bielefeld University
- AlexanderGerber, Project Lead, Rhine-Waal University
- Ellen Hannemann, Bielefeld University
- Zhang Huiliang, CRISP Beijing
- Annette Klinkert, Project Administrative Manager, Rhine-Waal University
- Yin Lin, CRISP Beijing
- Liu Xuan, CRISP Beijing (*attending with Chinese delegation and Director Mr. Wang Kangyou*)

- Robin Yee, Dissemination Officer and Research Associate, Rhine-Waal University

10.00 – 10.30 hours – Opening

- Start with an ice breaker.
- Set the agenda
 - Added – Field Trip to China in September 2016
- Introduce the CRISP delegation to the group
- Take a group picture

10.45 – 12.00 hours – Goals of NUCLEUS

- Presentation on the goals of NUCLEUS - Annette Klinkert and Alexander Gerber
- What does the project want to achieve?
- Current state of the art – discussion
- Alexander and Annette present main goal of NUCLEUS; to develop a 'DNA' for Responsible Research and Innovation.
- Mr. Wang Kangyou emphasizes importance of the project and provides more insight in the Chinese context. Main barriers in China are the lack of funding to give lectures for a broader audience and that science communication activities do not add to scientific tasks. CAST has the task to overcome these barriers. Mr. Wang is welcoming the group to Beijing.
- A group picture is taken.

12.00 – 12.50 hours – Lunch break

12.50 – 13.20 hours – European study

- Brief presentation state-of-the-art and discussion study design European Study – Ellen Hannemann and Stefan Fuchs

- Ellen and Stefan present the outline of the European part. Aim is to interview 150 respondents (120 leading researchers, 30 administrative officers from 14 universities). At the moment, they are evaluating feedback from the partners and are preparing for the meeting in Bielefeld on April 7. Various aspects of what to include in the questionnaire are discussed. Challenges are to operate within the complexity of the topic, the limited time frame and the different expectations. The meeting in Bielefeld is to further design the study.

13.20 – 13.50 hours – Approach to comparative study

- Set-up of the study – Anne Dijkstra
- Discussion with suggestions and possible approach
- The comparative part needs to comply with the European part. For the cases questions can be added. All needs to feed into the project.

13.50 – 14.45 hours – Chinese Science Popularization

- Presentation Science Popularization and Responsible Research and Innovation in China – Yin Lin (30 mins)
- Lin presents an overview of RRI in China. What is achieved and how it is looked at? Attention is paid to the socio-cultural context, local schemes and structures and main barriers and solutions. RRI is not as such labelled in China.
- Some notions: also include perspectives of other researchers than scientists. It comes down to asking researchers what they consider their role in society. Change leaders' roles are important.
- ZHANG Huiliang introduces previous research findings in China
- Huiliang presents the results of a 2013 national survey asking scientists (n=1512) about their attitudes towards science communication. The translated questionnaire, including tables with the descriptive statistics are available.

14.45 – 14.55 hours – short break (coffee/tea)

14.55 – 15.45 hours – Wrap up and future actions

- Conclusions and what to do next.
- What steps for the comparative study? Together
- **General:**
 - Regarding phrasing: all studies contribute to the larger NUCLEUS project.
 - All slides will be shared.
- **Questionnaire:**
 - The questionnaire will contain an introductory part and a main part to be used in all contexts. In addition, case-based questions can be added. Bielefeld is working on an introduction letter which invites the respondents to take part.
 - Sampling focuses on universities; respondents will be researchers and administrative officers. Regarding wording: 'scientists' in non-Anglo-Saxon countries includes broader backgrounds, therefore, the word 'researcher' better resembles the possible backgrounds.
 - Main part of all studies are interviews. Other data is additional.
 - China also includes researchers into the interview-study. They will provide the translated survey questionnaire. The literature study will be restricted.
- **Field trip China:**
 - The field trip to China will take place in September 2016. The dates have to be confirmed (around 15 – 19 September). Aberdeen is responsible for the organization. It is a working visit and uses the same methodology as for all field trips. CRISP can bring in stakeholders to be interviewed.
- **Final round:**

- Robin Yee: controls consistency of the documents; will take up translation of the website texts in Chinese
- Stefan Fuchs: is it possible to include contrasting cases; suggestions will be taken into account in Bielefeld at April 7.
- Alexander Gerber: experiences with China are enriching; today we achieved more common understanding
- Huiliang: suggests to keep in touch more frequently
- Yin: the fruitful meeting showed our common ground; Annette is asked to take up (with Florence) an official invitation for CRISP to the NUCLEUS meeting in Lyon
- Ellen: more clear how the questionnaire should look like
- Annette: change the date of April 7 because of an interesting conference on RRI in Lüneborg? After discussion it is agreed that the date will not be changed.

2.2 NUCLEUS – Socio-Cultural Comparison Methodology

The Working Group in London reflected and gave input to the following NUCLEUS – Socio-cultural comparison methodology designed by Twente University. The methodology will be updated in accordance with the project partners involved:

1. Introduction

The H2020 NUCLEUS project aims to collect data about Responsible Research and Innovation (RRI) which inform implementation plans for the 10 institutionalised NUCLEI (test beds for embedded RRI practice) around Europe, China and South Africa. The collection of data will be part of the first phase of the project. In the second phase the test beds will be implemented and evaluated. During the first phase, data are collected in various ways. An **interdisciplinary study** on RRI obstacles, understanding and ways to overcome them, will

be conducted at universities by means of interviews and document analysis. A series of **field trips** will collect experiences from six places where groups of stakeholders (cells) are asked about barriers and new ideas and approaches to the embedding of RRI principles which may inform tangible interventions and practice. In addition, an **international comparison study** will be done aiming to collect understanding about socio-cultural contexts and support of the non-European partners, China and South-Africa. This documents describes the methodology regarding the international case study comparison.

As in the other studies, the comparison study follows the definition of Responsible Research and Innovation (RRI) as defined by Von Schomberg (2013, p.19):

"Responsible Research and Innovation is a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products(in order to allow a proper embedding of scientific and technological advances in our society)."

2. Cases

Two international partners are included in the H2020 NUCLEUS project who provide the cases for the international comparison. These are the **China Research Institute for Science Popularization (CRISP) from China** and **South African Agency for Science and Technology Advancement (SAASTA) from South Africa.**

International comparison is of interest as it will enrich the insights from the European study. It can inspire new ideas and approaches to RRI which in Europe have been overlooked. In addition, it can shed light on other barriers than in Europe to implement RRI in practice. The two cases allow for a multi-methodological approach. Each case will be described in the same way to allow comparison, and the content of these descriptions will amongst others be based on elements that informed both the field trips as well as the interdisciplinary study.

3. Data collection and storage

The researchers from the University of Twente as well as the partners from China (CRISP) and South Africa (SAASTA) will be responsible for the organisation and collection of data. A multi-method approach is applied and, therefore, data is expected to come from a rich variety of sources and consists amongst others of publications (scientific articles and grey literature such as reports), written transcripts from interviews, emails, images, PowerPoint presentations. This information will feed into the analysis and the production of the comparison study report. The report will consist of the main sections:

- Introduction
- Methodological approach
- Findings o Overview of the two cases (e.g., local organisations, countries and their relation to RRI)
 - o Local schemes and structures which support RRI
 - o Local barriers and successes (e.g., new ideas and approaches) to RRI
- Recommendations to the NUCLEUS consortium to be integrated into the implementation roadmap
- References

An upcoming NUCLEUS Working Group on “International comparison” will reflect the outcomes of the Field Trips to the consortium members responsible for the study, to ensure an ongoing knowledge transfer.

3. Working Group Bielefeld, 7 April 2016

Location: Bielefeld University, Universitätsstraße 25, 33615 Bielefeld

Room: A2-103, X Building

Attendees:

Alexander Gerber	- Rhine-Waal University
Annette Klinkert	- Rhine-Waal University
Robin Yee	- Rhine-Waal University
Annika Döring	- Ruhr Universität Bochum
Anne Dijkstra	- University of Twente
Mirjam Schuijff	- University of Twente
Kenneth Skeldon	- University of Aberdeen
Heather Rea	- University of Edinburgh
Martin Carrier	- Bielefeld University
Rolf König	- Bielefeld University
Peter Weingart	- Bielefeld University
Ellen Hannemann	- Bielefeld University
Stefan Fuchs	- Bielefeld University
Theda Minthe	- Science City Hannover
Karen Moss	- Nottingham Trent University
Steven Flipse	- Delft University
Anna-Maria Komprecht	- City2Science

11.00am – 11.05am

Welcome

Martin Carrier welcomes all attendees to Bielefeld University and introduces the spirit of the university, emphasising its architectural design as a 'knowledge factory'.

11.05am – 11.22am

Introduction of participants and their role in the project

11.22am – 11.36am

NUCLEUS – Objectives, Goals, Project Architecture

Alexander Gerber suggests that the goal of NUCLEUS is to build a 'DNA' for 'Responsible Research and Innovation' (RRI) by creating practical tools and recommendations for research institutions. We want to understand why isn't RRI happening. We may not be able to change scientific institutions but it is a goal worth pursuing in principle. We want to deliver potential solutions to policy makers.

11.36am - 11.47am

Report of first NUCLEUS field trips

Kenneth Skeldon says that we are at a half-way point of the six field trips. The previous field trips were to Budapest, Edinburgh and South Africa. The upcoming field trips are going to be in Nottingham, Dublin and China. All field trips are based around the cells of NUCLEUS, each field trip has a certain focus on it. Everybody can read the report of each field trip and the methodology (www.nucleus-project.eu).

The main outcome of the field trip to Budapest is that there are lots of new challenges for science journalists. Heather Rea talks about the field trip to Edinburgh. We can't change science within four years and we have a long list of barriers to RRI.

11.48am – 12:03pm

Introduction to the NUCLEUS study, incl. concept and design

Martin Carrier introduces the I²SoS (Institute for Interdisciplinary Studies of Science) and emphasises that we need to take epistemic characteristics of science into account and preserve the nature of science as a knowledge seeking enterprise. One goal is to produce a system of RRI and reconstruct the characteristics of the science-society interface. The second goal is to identify relevant thoughts. How is RRI perceived by researchers and administrative officers? We want to identify possible obstacles to RRI and we need more specific information of prevalent views and opinions. We need to stimulate reflections and want to find out real

attitudes, ask concrete questions and enquire about hopes and worries harboured by researchers and research executives.

12:03pm – 1:00pm

Moderated discussion about the questionnaire

The test run of the study is going to be in the University of Twente on the 18th and 19th of April, so that we are ready to start the interviews in the beginning of June 2016. The end of the interviews is September 2016. Afterwards we are going to start with the analysis of the interviews.

Stefan Fuchs, Ellen Hannemann and two Master's students from the HEPS-programme are going to conduct the interviews. The consortium partners should act as door openers to the interviewees who should be 30 research executives and 120 leading researchers from the European consortium. Maybe we will switch to 60 research executives and 90 researchers.

The consortium agrees that it could be good to talk to younger researchers because naturally they have a different perspective and different kinds of insights. We should identify the role of the interview partners in more detail. Junior and senior is a good category, so that we can ask for the role and the category.

There is the concern that those kinds of questions cannot answer by these persons because they are too far removed from the phenomena we ask about. We should say why we want to talk to especially this person or otherwise the interview might be given to lower-ranking persons. We should take the cultural context into account. Some of the language is a bit scientific.

The questionnaire is a little bit too long and it was suggested that the questions be reviewed to ensure that it does not exceed the time of 45 minutes. It needs to be clear what is going to be anonymised and what is the possible use of it.

The introduction should consist of essential information only. For example: project, Horizon 2020, connections between stakeholders and scientists.

One suggestion for the interviews is to use CATI (Computer Assisted Telephone Interview) but following some discussion, this method was considered over complicated to use.

We should find out what motivates people to go out to the public. But we need to be specific in asking questions, like: 'What do you think about RRI?' and we should be more practical, like: 'With whom do you want to work?' and 'What is working well?'.

1.00pm – 2.05pm

Lunch in the canteen

2.05pm – 3.00pm

Moderated discussion about the questionnaire

Stefan Fuchs talks about the current structure of the questionnaire and what could be changed. The consortium says that we want reflections from the interviewees, and information on how what their institutions are doing at the moment.

Some members of the consortium suggest that everybody of the working group has to think about what we want to know from the interviewees. White notes are for the researchers, coloured notes for the rest.

After this brainstorming session about core themes for the interview, we discuss the interview with the administrators, who should be called 'research executives' from now on.

Question 1:

We should think about positive and negative examples. It could be asked: 'What does responsible research mean to you?', 'How do you support RRI?', 'What is the role of science in society?' or 'How would you define RRI in your context?'

Question 2:

It is pointed out that 'non-academic actor' and 'societal actor' is academic wording. 'Actor' is a word in the film business and should not be used in interviews. 'Stakeholder' is better than 'actor'. Some of the language is overly complex, we should make it simpler. Questions 2, 4 and 7 can be linked together.

Question 5:

This question is unnecessary because it is limited to the United Kingdom. Questions 5 (Athena Swan/HR Excellence) and 8 (Intellectual Property Rights) can be dropped.

Question 7:

The consortium suggests questions like: 'What institutions do you have partnerships with?', 'Does your institution promote science outreach?' or 'Has your institution worked with partners from:...' and then add a list with options.

Question 10:

The consortium suggests questions regarding the new definition from the European Commission, like 'What kind of sense does it make for your institution?' and 'What should be implemented and what not?'. We should hand out the written definition to the interviewees.

Question 11:

The consortium suggests questions, like 'What could you do in the next two years?' and 'What is the next practical step you could do?'

The consortium suggests to send out the questionnaire and get e-mail feedback for the wording. We should call this 'interview questions' or 'interview protocol' instead of 'questionnaire'.

3.00pm – 3.15pm

Coffee break

3.15pm – 4.00pm

Summary of results and further actions

- Mirjam Schuijff emphasises that we are making progress and it is good to discuss things. We saw the complexity of language.
- Theda Minthe says that words are not easy to form. We see that we are not so far away from each other. She offers her journalist background.
- Annika Döring thinks that the discussion has been helpful and we see that all follow the same way. It is good to talk about the wordings.
- Karen Moss pronounces that the working group is helpful to understand the bigger context. We get a better picture of what we want to do. She likes the 'eggs of inspiration' (coloured post-its).
- Ellen Hannemann thinks that it is good to talk about everybody's views.
- Steven Flipse thinks that perhaps a separate study prior to implementation could be helpful.
- Annette Klinkert thanks the Bielefeld team for organising the working group.
- Kenneth Skeldon sees an overlap with the study and the field trips.
- Stefan Fuchs agrees to put the ideas together and is happy about feedback to make wordings much simpler.
- Robin Yee says that we see that our intentions are similar. She appreciates how difficult it is to work in a second language.
- Anne Dijkstra thanks the Bielefeld team for organising the working group and is looking forward to the test run to Twente in one and a half weeks.
- Martin Carrier thanks the working group for coming to Bielefeld. We realise that some of the language is complicated and should be made easier. We have benefitted from

the help of the working group. For the interviews we link questions 2, 4 and 7 and drop questions 5 and 8. We keep question 9 and add question 10a with practical questions. We will also add a question to the effect of 'What else do you have to suggest?'

- Professor Carrier asks the working group to send specific suggestions for formulations to Ellen Hannemann until Sunday night.
- Alexander Gerber mentions that this working group helps all sides to achieve a common understanding. NUCLEUS is not investing RRI, it is just implementing RRI and we are exercising RRI.

Deliverable No. 4.8

This report was prepared by Aberdeen University.

It was submitted on 28 September 2016 to the European Commission.

For more information on the NUCLEUS project, please visit our website or contact the coordinating team:

NUCLEUS Online: <http://www.nucleus-project.eu/>

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