



**poiesis**  
TRUST IN SCIENCE

# D1.1: Protocol for stock-taking and analysis

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<b>ABSTRACT:</b>	This deliverable describes the research design, structure and organisation, data collection and analysis strategies for the empirical work in work package 1 of the POIESIS project.
<b>Keyword List:</b>	Eurobarometer, survey data, public trust, expert workshop, indicator

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### List of abbreviations

<b>D</b>	Deliverable
<b>EB</b>	Eurobarometer
<b>ESS</b>	European Social Survey
<b>EVS</b>	European Value Survey
<b>FFP</b>	Fabrication, Falsification, Plagiarism
<b>IRIS</b>	International research integrity survey
<b>OS</b>	Open Science
<b>PE</b>	Public Engagement
<b>QRP</b>	Questionable Research Practice
<b>RQ</b>	Research Question
<b>RRI</b>	Responsible Research and Innovation
<b>WGM</b>	Wellcome Global Monitor
<b>WP</b>	Work Package
<b>WVS</b>	World Value Survey

# 1 Introduction

POIESIS will pursue its overarching objective by answering the following four main research questions:

- RQ1: How can the nature and scale of public trust and mistrust in science be characterised and which are the factors that affect the relationship?
- RQ2: To what extent and how does the alignment of research practices with principles of research *integrity* (or, conversely, scientific misconduct, questionable research practices, poor or absent science communication, and/or misinformation) impact public trust in science?
- RQ3: To what extent and how does the *integration* of citizens and societal stakeholders in research practices (or, conversely, lack of co-creation and open science practices) impact public trust in science?
- RQ4: To what extent and how can *institutions* provide policies and procedures that enable researchers to act in ways that are conducive to public trust in science?

These main research questions will be addressed in four substantive work packages.

In WP1, a scoping and synthesis exercise based on relevant existing data streams, including prior European projects, Eurobarometers, and national science surveys, will be complemented with expert workshops. This will enable us to set the framework that helps to address the following sub questions:

- What are the sources of public (mis)trust in science according to available evidence from the academic literature, previous EU projects, Eurobarometers, and national science surveys?
- How do levels of public (mis)trust in science compare across countries, disciplinary topics, and temporal periods according to the academic literature, previous EU projects, Eurobarometers, and national science surveys, and how can differences be associated with issues of integrity (e. g., cases of research misconduct) and integration (e. g., open science practices)?
- Which mechanisms connecting (ir)responsible research practices and levels of public trust in science are identified by experts?
- What can existing evidence say about mechanisms for citizen co-creation of R&I and the role of 'chains of mediation' between research and citizens in relation to trust, and where do we currently lack sufficient understanding?

WP1 will examine the extent and limitations of expressing the relationship between integrity, integration, and trust as relations between quantitative variables as defined in the RQs.

This document describes the protocol for stock-taking and synthesis within the work package (WP) 1 of the POIESIS project.

The overall objective of WP1 is to curate, (re-)analyse, and synthesise secondary data on citizen trust in science, responsible research practices, citizen co-creation, and institutional efforts to support integrity and integration, and to make data, analyses, and recommendations available to the other WPs and stakeholders.

Therefore, the aims and plans outlined in the following protocol have three related foci:

- Delivering descriptive results and insight on the aspects mentioned to inform other WPs in the first phase of the project. Descriptive outputs from this phase are likely to be used as conceptual inputs and stimuli visualisations for the various engagement activities in WP2 and WP3.
- Outlining the more complex and long-term plans for conducting analyses in WP1 in the further course of the POIESIS project. This concerns in particular the various trajectories and determinants of trust in science, and the relationship of trust in science to integrity of science and its public engagement records.
- These two primary foci will culminate in Deliverable D1.4. D1.4 will be used for examining the empirical relations and will provide added value beyond this by providing a publicly available database.

The document is based on the principles agreed on in the POIESIS Consortium Agreement and in D5.1: Research Integrity and Quality Assurance Plan for the POIESIS project.

The steps, tasks and procedures proposed in this protocol refer to the proposal submitted by consortium partners and the Grant Agreement for the POIESIS project (Number 101057253) and are suggested to meet the objectives of WP1. These pertain to securing data, exploring, constructing and validating indicators, synthesising data and organising expert workshops related to this task.

## 2 Collecting and securing data and evidence

### 2.1 Collecting and securing data

Within WP1 we will systematically search for and document the following types of data:

Table 1: Different foci of indicators of trust, integrity, and integration

Topics/Aspects	Types of data	
	Representative citizens' public opinion data	(Representative) Researchers' survey data
<b>Attitudes to science in general</b>	<p>A) Direct and indirect indicators for citizens' trust in science<sup>1</sup></p> <p>Surveys measuring public attitudes and trust in science; direct means by asking about 'trust or confidence', indirect means by asking about aspects that can be seen as proxy of trust</p>	<p>B) Researchers' awareness and evaluations of the public's attitudes towards science</p> <p>Surveys asking about how researchers see the public, assess public attitudes and trust in science</p>
<b>Research integrity/ RRI</b>	<p>C) Citizens' awareness and evaluation of research integrity/QRPs</p> <p>Surveys asking the public about incident awareness or importance of epistemic integrity of science</p>	<p>D) Researchers' assessment of and attitudes towards research integrity/QRPs</p> <p>Surveys asking researchers about 'research integrity', its incidents rate and significance</p>
<b>Integration / PE in science</b>	<p>E) Citizens' attitudes towards public engagement in science</p> <p>Surveys asking the public about public engagement with science, e.g.,</p>	<p>F) Researchers' attitudes towards public engagement in science</p> <p>Surveys asking researchers participation in PE,</p>

<sup>1</sup> When referring to 'trust in science' here, this does not mean that we will search for data based on a specific and possibly narrowing concept of 'trust in science' but due to the nature of the work in WP1 (using existing data(sets)), we will look for and include measures for different possible objects of trust: science, scientists, scientific institutions, scientific methods etc.

	participating in such opportunities, normative importance of PE opportunities, evaluation of actual significance of PE	significance, and potential impacts
<b>Major public scandals</b>	G) Recorded (national) breaches of integrity (FFPs and QRPs); only cases with high level of public attention (threshold cases)	

regarding data type A) *Direct and indirect indicators for citizens' trust in science*

- These will be derived from data 'observing the public' on a nationally representative level - ideally from regular surveys with data from different points in time.
- Direct indicators = Data from survey questions and items directly addressing the issue of trust/confidence, dis-/mistrust; dimension directly expressed in question wording
- Indirect indicators = Data from surveys questions and items on general science attitudes (e.g., evaluations of benefits and reservations or addressing dimensions of trust like expertise, benevolence, integrity and openness)
- Data will be gathered regarding science and research in general as well as with a topical focus on Covid-19 and climate science.
- Data will be collected and secured via the following strategies:
  - o with priority from relevant Eurobarometer surveys
  - o complementary from national science surveys especially on climate change and Covid-19
  - o from other multinational surveys (Pew, Wellcome Global Monitor, Edelman, WVS, ESS, EVS) (if available)

regarding data Type B) *Researchers' perceptions and evaluations of the public's attitudes towards science*

- These are data observing the observers (researchers) observing the public - ideally also on a (nationally) representative level.
- Data from questions and items from researchers' surveys (e.g., general national researchers' surveys, researchers' surveys on science

communication, open science etc.) addressing their perception of the public and the public's attitudes towards science and research

- This might include items such as 'The public has interest in science.'/'The public has sufficient trust in science.', 'Public decisions sufficiently take research results into account.' etc.

*regarding data Type C) Citizens' awareness and evaluation of research integrity/QRPs*

- These are data observing the public on a nationally representative level - ideally from regular surveys with data from different points in time.
- Data from questions and items from public opinion surveys addressing the citizens' awareness of questions of research integrity and QRPs (e.g., What do people actually know about research integrity? Of which types of QRPs are they aware?) as well as their attitudes/evaluations of it (How do they perceive it? - Flawed research vs. self-correcting mechanism of science?)
- Data will be gathered towards science and research in general as well as with a topical focus on Covid-19 and climate science (if available).

*regarding data Type D) Researchers' assessment of and attitudes towards research integrity/QRPs*

- These are data observing researchers' self-assessment - ideally also on a (nationally) representative level.
- Data from questions and items from researchers' surveys (e.g., general national researchers' surveys, researchers' surveys on research integrity/QRPs, open science etc.) addressing their assessment of and attitudes towards research integrity/QRPs (e.g., Which breaches of research integrity/types of QRPs are most common or relevant from the researchers' perspective? How do they perceive public cases of QRPs?)

*regarding Data Type E) Citizens' attitudes towards public engagement in science*

- These are data observing the public on a nationally representative level - ideally from regular surveys with data from different points in time.

- Data from questions and items from public opinion surveys addressing the citizens' attitudes towards public engagement in science and research (e.g., What level of public involvement do you think is appropriate when it comes to decisions about science and technology?)
- This also includes expectations of the public with regard to governance and public participation.

*regarding data Type F) Researchers' attitudes towards public engagement in science*

- These are data observing researchers - ideally on a nationally representative level.
- Data from questions and items from researchers' surveys (e.g., general national researchers' surveys, researchers' surveys on science communication, open science etc.) addressing attitudes towards public engagement in science and research (e.g., What level of public involvement do you think is appropriate when it comes to decisions about science and technology?)

*regarding data Type G) Data on (public/recorded) cases of breaches of research integrity (FFPs and QRPs)*

- These are quasi-actuarial data on events and incidents of QRPs.
- Data on/Collection of cases of breaches of research integrity/QRPs which became public.
- We will only consider cases that reached the threshold of public attention and therefore contribute single or cumulatively to issue awareness of citizens.
- We will create a database of cases with comments for each of the POIESIS countries.
- This will give us a sense of 'public attention' to issues of research integrity in the various countries, which is very different from any incident rate of breaches of integrity. Very few cases are selected for public attention by the national system of 'news value'.

Table 2: Available data sources (based on the current status of planning)

data source	data types	years	comments
<b>multinational sources</b>			
Eurobarometer surveying public science attitudes	A, C, E	1989-2021	with a focus on Special EB 516
EVS	E, (A)	to be researched	
ESS	E, (A)	to be researched	
WVS	E, (A)	waves 2-7	focus on science items
WGM	A	2018, 2020	
IRIS	B, D, F	2021	integrity indicator based on data gathered at the level of the individual researcher
MoRRI	B, D, F	varia	RRI indicators based on data gathered on the national level
Super-MoRRI	B, D, F	varia	RRI indicators based on data gathered on national and organisational levels
MORE-PE	B, F	2017-2018	PE indicators; DE, PT, UK based on data gathered on the institutional level
OPEN	B, F	2020-2021	PE indicators; DE, PT, UK based on data gathered on the institutional level
<b>national sources</b>			
national public opinion surveys on general attitudes toward science	A, C, E		to be provided by local partners in each of the 7 countries in which POIESIS consortium members are located (see Box 1)
national public	A, (C, E)		Trust in science the context of

opinion surveys on attitudes toward science in the context of Covid-19 and climate change			Covid-19 and climate change to be provided by local partners in each of the 7 countries in which POIESIS consortium members are located (see Box 1)
national researchers' surveys on science communication, research integrity, QRPs	B, D, F		to be provided by local partners in each of the 7 countries in which POIESIS consortium members are located (see Box 1)

Elements of a strategy for collecting and securing data(sets) regarding aspects A) to G):

- Refer to existing knowledge, data files/stream known by/available at LSE, WiD
- Securing data via networks of consortium partners (see Box 1)
- Desktop research (in archives/databases)
- Input from expert workshop I (see Section 4)

Within WP1, efforts will be undertaken to collect and secure data on aspects A) to G) for each of the seven countries represented in the POIESIS consortium while being aware that for some aspects, and/or some countries, data might be limited or non-existent. Regarding aspects A) to F), data will be collected in the form of descriptive data (e.g., results reports) or in the form of data files containing raw data (when available). Data will also, whenever possible, be collected and secured for different points in time.

**Box 1: Contributions from all consortium partners in WP1**

Before the end of 2022

Mail to all consortium partners by LSE/WiD in the 2nd half of November asking for:

- providing information about cases of scientific malpractice and public scandals in the respective countries over the past 10 years (adding to data type G).
- providing information (data tables, reports, raw data) on
  - o existence and availability of national public opinion on science attitudes (adding to data type A, C, E)

- o existence and availability of national public opinion data on science attitudes in the context of Covid-19 and climate change. (adding to data type A)
- providing information about existence and availability of surveys of researchers' as far as they exist nationally (adding to Data type B, D, F).
- Additionally, Aarhus University to provide an overview map of the IRIS survey of QRPs among scientists (conceptual map, questionnaire etc.).

After hearing back from consortium partners, if necessary, individual meetings between LSE/WiD and local consortium partners will be scheduled at the end of December/early January.

Until the end of January 2023 and continuously through the life cycle of the project:

- Information and links to any literature/research, published or grey, research that links integrity, integration and trust.
- Continuously, provide information on new surveys/survey waves of national public opinion on science attitudes (adding to data type A, C, E)
- To be added upon in the further progress of WP1, depending on path of analyses.

## 2.2 Collecting and securing evidence

Apart from data described in section 2.1, WP1 will also collect and secure:

- H) Empirical evidence on the relation of perceptions and evaluations of research integrity and trust in science; this might include pertinent empirical studies that link e.g., practices of OS and public trust in science.
- I) Empirical evidence on the role of integration, communication/engagement/co-creation (with regard to questions of research integrity) and its mechanisms in effecting (public) trust in science

While the focus of WP1 is evidence of a systematic and representative nature of either the nation or the scientific community provided ideally by surveys repeated at different points in time, we might also consider evidence of a more case study nature, making empirical claims on the relation between integrity, integration and public perception.

This includes evidence again about general trust in science as well as in relation to topical focus on Covid-19 and climate change/science.

Since initial desktop research within the phase of project development and proposal writing of the POIESIS project did not reveal much existing evidence (in the form of published papers, empirical analyses etc.) on aspects H) and I), consortium partners are aware that there might be only a very limited amount of empirical evidence available - either from case studies/experiments or based on an aggregated/nationally representative data. Due to the crucial nature of the relations of trust in science to perceptions and evaluations of research integrity as well as to the role of communication/engagement/co-creation, it is considered appropriate to do some research regarding that in WP1 even though a systematic literature review seems not to be in order.

Elements of a strategy for collecting and securing empirical evidence regarding aspects H) and I):

- Refer to existing knowledge within the consortium (to be completed in M4 -> contributing to D 1.2)
- Forward and backward citations of relevant papers cited in the proposal (to be completed in M5 contributing to D 1.2)
- Desktop research (in databases e.g., Web of Science, Scopus) (to be completed in M5 contributing to D 1.2)
- Contacting authors of relevant papers and ask for data sharing under open/FAIR principles (to be potentially included in the database D1.4, tbd based on findings/availabilities)
- Input from expert workshops I and II (adding to results in D 1.2. in the further course of the project)

## 3 Analysing data and constructing indicators

According to the POIESIS proposal and grant agreement, the Deliverables planned for WP1 are presented in Box 2.

**Box 2: Further Deliverables foreseen in WP1 in the proposal for the POIESIS project**

D1.2: Dataset on core time-series items, climate science, and Covid-19 (M5; LSE)

D1.3: Indicators for responsible research practices and trust in science (M22; LSE)

D1.4: Consolidated OA data set for responsible research practices and trust in science (M24; LSE)

D1.5: Integrity, integration, and institutions for trust: Recommendations based on evidence from secondary data sources (M30; WID)

In order to produce the planned Deliverables and to align with the requirements for WP1 in the larger context of the POIESIS project, analysing data will result in more short-term insights (mostly based on descriptive data). These Insights will inform further work in the POIESIS project and more complex and long-term analyses of the various trajectories and determinants of trust in science, and the relationship of trust in science to integrity of science and its public engagement record.

### 3.1 Country reports – Trust in science, research integrity and public engagement

Based on the information provided by all partners (see Box 1), WP1 will produce preliminary reports of descriptive data for seven countries participating in POIESIS: Denmark, France, Germany, Greece, Portugal, Spain and the United Kingdom. These reports will present descriptive data insights on the aspects A - G and generally and individually for each country.

These reports will kick-start the discussions within the POIESIS project about the potential relations between integration, integrity, and trust in science, both in relation to general trust in science, but also trust in the specific contexts of climate change and Covid-19. The differences and similarities between general trust and specific issues or context-based trust in science will be a constant focus of WP1. Climate change constitutes a situation of 'aggravating background risk', and Covid-19 is a clear 'emergency' situation. It will also include a preliminary chronology of

misbehaviour in the science community that passed through a threshold of reaching public attention in each of the countries.

This preliminary descriptive evidence will support the discursive case studies as well as the participatory research actions in each participating country in WP2 and WP3. WP1 will provide the basic reports summarising key variables on the aspects A) to G) for each country in which a POIESIS partner is located.

This data can then be professionally visualised and used as inputs for stimuli material in activities in WP2 and WP3.

### 3.2 Report on empirical evidence on relation between trust, integrity, and integration

An initial report will be provided on the empirical evidence found on aspects H) and I) to inform the POIESIS project, especially the case studies but also the participatory research actions in WP2 and WP3. This will mainly be produced through desk research.

### 3.3 Listing of available sources

Since a variety of survey activities (of public opinion as well as of researchers' attitudes) is going on in different European countries, with additional multinational endeavours, it is difficult to keep track of the entire survey activity within an individual country. A key task of WP1 will be to list links to polling sources in the participant countries indicating general trust in science as well as trust in science in the context of climate change and Covid-19. We envisage collating a table in the nature of the draft presented as Table 3. It will not directly include the datasets of public attitudes but rather links to archives or websites where these are available.

Table 3: Template for collection national sources with exemplary listings

country	public opinion survey on science in the context of climate change	public opinion survey on science in the context of Covid-19	public science surveys/surveys covering trust in science, RRI, PE	national researchers' surveys
France			1993-2021, 8 waves	
Portugal		2021		

<b>Denmark</b>				
<b>United Kingdom</b>		regular polling; OPINIUM, IPSOS, YouGov etc.	BAS, 1988-2022	
<b>Greece</b>				
<b>Germany</b>		Wissenschaftsbarometer 2020/2021	Technikradar 2017-2021 (4 waves) Wissenschaftsbarometer, 2014-2021	
<b>Spain</b>				

The reports referring to sections 3.1 and 3.2 as well as the Table described under 3.3. will together form Deliverable 1.2, due in Month 5 of the POIESIS project.

It will be descriptive in nature and based on secondary data but at the same provide a first overview of which data streams, on which topics, for which countries, and over which periods of time, are available for further analyses within the POIESIS project. D 1.2 will serve as a map for the further work of WP1, adding to this protocol throughout the project. D 1.2 will be publicly available on the POIESIS project website.

Potentially, availability of data for different countries from multinational surveys presented in Table 2 could be added to Table 3 in the further course of the project.

### 3.4 Constructing indicators & developing a cross-national multi-dimensional dataset

#### 3.4.1 Preparing data on trust in science

Crucial for the further work in WP1 will be to collate the different versions of asking about trust in science arising from data from different sources of public opinion, and when considering that trust is a relative concept. Levels of trust can be assessed using the word 'trust' or 'confidence', or descriptions such as 'doing a good job', or as general trust or depending on the issue, and depending on the trustee (trusting whom; the target of trust). We will tabulate different versions of this trustee/trustor relational question of 'trusting A or B doing the right thing on the issue to X' or having 'confidence in A doing the right thing on the issue X'. The logic of this trustee/trustor relationship will be clarified.

**Box 3: Different logics of the trust relation**

T (R, A) / X on Y (confidence/trust, no option on actors)  
 T (R, (A, B)) / X on Y (trust, with option on actors)

Various reductions, partial specifications and aggregations:

T(R) (general trust of R, unspecific)  
 T(R, A) (R trusting A)  
 T(R, A) / X (R trusting A doing the right thing)  
 T(R, A) / Y (R trusting A on issue Y)

3.4.2 Constructing indicators

We envisage constructing and validating different types of indicators of trust, integration, and integrity, depending on the types of data that can be secured for further analysis. We will consider indicators constructed at the level of micro-data (e. g., summative scales) and indicators constructed at the aggregate-level of marginal distributions (e. g., based on response patterns); the central tendency and variability of these indicators will be of interest for purpose of cross-country comparisons. The indicators entering the open access database will be of different kinds, which will be comprehensively annotated in the meta-data. Table 4 shows the form in which the indicators will be defined in the meta-data of the database.

**Table 4: Template for the composition of different indicators**

indicator	Items	Type
Trust1	I1 + I2+ I3 ...k	Composite indicator at the level of micro data; descriptive or latent class
Trust2	I1, I2, I3 ... K (formula)	Index derived at aggregate level
Trust3	I1	Single item indicator, individual level micro data
Trust4	I1	Single item index, aggregate
Integrity1		
Integration1		
.....		

3.4.3 Building the database

The database will be constructed with the format defined in Table 5. It will have a three-dimensional matrix structure: country x times x indicators. This database will be updated throughout the project until reaching its

final format. The final format will become an open access database of the project POIESIS.

This database will contain general trust in science indicators and specific indicators of trust in the context of climate change and Covid-19 and will include a great diversity of such indicators. The database might include the indicators as base value, or as measures of association with classes of predictors (see 3.5).

Eurobarometer reports will be able to provide basic time-series data for all seven participating countries from 1989 to 2021, as all were members of the European Community over the entire period. Data on the UK was included in 2021, despite the UK leaving the EU in 2016. National data will complement this time-series data at different intervals based on availability. Other data will only add indicators for particular years, most likely for more recent years (e. g. Wellcome Global Monitor 2018 and 2020).

The finalisation of Table 4 and Table 5 will be the basis of D1.3 and D1.4.

**Table 5: Template for the 3D matrix of indicators of trust, integration, and integrity**

Country	Trust indicat or 1	Trust indicat or 2	RI indicat or 1	RI indicat or 2	PE indicat or1	PE Indicatt or2	.....
DE							
T 1							
T 2							
k...							
UK							
T 1							
T 2							
.k..							
DK							
T 1							
T 2							
...							
ES							
GR							
PR							
FR							

### 3.5 Planned analyses

Analyses in the further course of the project will focus on working with data regarding integrity, integration, and trust (see Table1)

Analyses will explore and analyse the curated data tailored to the concepts of the 3i4t model proposed in the POIESIS project proposal and based on the formulated research questions. Empirical indicators will be built, and their functionality tested on the available data streams, over time and between countries.

Detailed steps can only be planned once the available data is reviewed and the extent of it becomes clear, but we envisage at least three kinds of analysis:

- Aggregated level analysis and comparison of national data (see 3.4). Under this heading we will conduct comparative analyses of our main database (see Table 4 and Table 5) at the level of country and over time.
- Individual level analysis of micro-data to examine the determination of trust, this will include multivariate analysis of trust items, regression analysis of factors loading onto trust. There is already quite a large field of research, including survey and experimental research, that seeks to determine the levers of trust. We will add to this field from our own data, mainly by analysing data from Eurobarometer 516 (2021), and WGM (2018 and 2020).
- Micro-level regression analyses will be undertaken and compared across the participating countries, to demonstrate whether trust is constituted similarly or differently in different 'science cultures'.
- Individual level analysis of the relation of trust in science with perceptions and evaluations of scientific integrity by citizens. Based on the data which we will, we will identify public opinion datasets which are rich on information about this relation and focus on them to analyse how trust in science is related to knowing and thinking about scientific integrity on the individual level.
- We will compare observations on trust in science in general and observations on trust in the specific contexts of climate change and Covid-19. This will examine the question: What is the effect of an 'aggravating background risk' or an 'emergency' situation on the dynamics of trust.

We expect that these analyses will support the production of 2-3 scholarly papers published in peer-reviewed journals.

## 4 Workshops

WP1 also envisages conducting three expert workshops over the life course of the project.

### **Workshop 1 in Year 1**

We will invite a group of experts who are involved in surveying public attitudes to science in European countries and beyond the participating partners countries. This will help us to secure data on trust, to examine different concepts of trust and their operationalisation, and to examine how such differences make a difference to interpretation or trends.

The workshop is planned as a one-day or two half-days in-person workshop in Berlin. We will be inviting around 10 representatives of/experts on public science attitudes in Europe (plus POIESIS consortium members), among them:

- Representatives of University Zurich/University Munster running the Swiss Science Barometer
- Representatives of Vetenskap & Allmänhet running the Swedish VA barometer
- Representatives of Observa running the Italian Observa Monitor
- Representatives of Luxembourg National Research Fund running the Luxembourg public science survey
- Representatives of Rathenau Instituut running the Dutch Trust in science survey
- Representatives of the Austrian Academy of Sciences newly setting up a science survey to be run in 2022/2023
- Representatives of acatech/Körber Foundation running the German Technikradar

### **Workshop 2 in Year 2**

With this workshop we will invite a group of experts who have worked on trust in general or trust in science in particular. We will invite them to present their research or summarize relevant literature that provides evidence about the relationship between institutional misbehaviour and public trust and reputation.

Our search for evidence might open up here towards a potentially fertile analogy between integrity, integration and trust in science, and corporate realities of crisis, scandal and reputation disasters (e.g., the Diesel scandal in the automotive industry); in particular, evidence on the recovery of reputation after the event might be of interest for the POIESIS project.

This workshop will bring together experts from the field of science communication, public understanding of science and the field of reputation and crisis management in public relations, to examine the relationship between conduct, reputation, and public trust. We will examine analogies and contrasts between the world of research and the corporate world of services and product marketing.

We envisage this workshop will take place in the form of a one-day or two half-days event in either London or Lisbon with up to 10 experts with special knowledge of perceptions of integrity and the role of (crisis) communications/public relations (plus POIESIS consortium members).

### **Workshop 3 in Year 3**

In this workshop we will invite experts from the world of trust in science, to comment and discuss our own attempts to operationalise 'trust' directly and indirectly. We will hereby test the robustness of the analyses produced by POIESIS.

We envisage this workshop take place one in the form of a one-day or two half-days vent in Brussels inviting up to 15 experts from the science of science communication but also with a policy-background. These experts will discuss the results and implications of POIESIS analyses.

## 5 Research ethics & Data security

The WP leader will ensure that the work within WP1 will be conducted according to D5.1: Research Integrity and Quality Assurance Plan of the POIESIS project. Presumably, WP1 will mostly make use of existing, anonymised data sets. Feedback on data availability, the status quo of research, as well as planned analyses within the POIESIS project, will be provided by external participants in the expert workshops. The feedback provided will be of an advisory nature. This feedback will not be regarded as primary/research data, so an ethics approval does not seem to be necessary for the activities of WP1.

Even though the data handled in WP1 will presumably not include personal data particularly worth of protection, it will be ensured that data will be stored and transferred via consortium and associated partners in a safe environment. This will take place in line with D5.2 Data Management Plan.

All deliverables produced in WP1 will be publicly shared via the POIESIS website and through the network of all consortium partners, especially WiD and LSE.

D1.4 will be made publicly available through an archive to be shared with other for further analyses. The D1.4 data archive, like all POIESIS projects outputs, will be produced with attention to the FAIR Data Principles<sup>2</sup>. D1.4, like other POIESIS project outputs will be posted to Zenodo.<sup>3</sup> The data and metadata prepared for D1.4 will follow the relevant OpenAIRE guidelines in order to integrate with the OpenAIRE infrastructure.<sup>4</sup>

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<sup>2</sup> <https://www.nature.com/articles/sdata201618>

<sup>3</sup> <https://zenodo.org/>

<sup>4</sup> <https://guidelines.openaire.eu/en/latest/>