APPENDIX 2 - RISCAPE Questionnaire

No	Question	Data type	Guideline for interviewer (can be shared)	Terminology / clarification
1	**Name of the respondent**	Text	We need to record the name of the responent. Provenance requires us to know who is answering the questions: For follow-up, and further questions, and to understand the position of the person.	
2	**Job title**	Text	Same reason as the name of the responent. Need to confirm their position in the organisation	
3	**Who can we contact for further comments/queries? Please provide name & email.**	Text	The contact information is crucial for provenance, and makes it possible to return to the person answering (or the organisation)	use English translation if official is found – also record official name in local language is reasonable within Latin alphabet
4	**Organisation full name**	Text	For presentation of results	use English translation if official is found – also record official name in local language if reasonable within latin alphabet
5	**Organisation short name**	Text	For presentation of results	use English translation if official is found – also record official name in local language if reasonable within latin alphabet
6	**Website address of the organisation**	Text	For presentation of results	
7	**Head office address**	Text	For records, and for geographical coverage	Head office: The administrative headquarters of an organisation. This is usually where the director is located

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8	**Official contact email**	Text	For records, gives the location of information collection. We would need a way for the future users of the RISCAPE reports to contact the organisation if needed. Thus an email address (not personal if possible) is advantageous	

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9	**ESFRI in Europe divides research infrastructures in three categories:** **1. single-sited** **2. virtual** **3. distributed** **Which do you think best describes your organisation, if any? (you can give additional information in the next question)**	Multiple choice	Categorise the Ris according to the ESFRI definition of Project or Landmark – helps on the comparisons and listing. One is preferred, but in some cases it might be necessary to have several if the organisation has many quite different aspects serving different needs.	ESFRI: European Strategy Forum on Research Infrastructures Research Infrastructure: A science oriented service provider for researchers to do their science. Typically providing services (access) to facilities to too large or expensive to be used without sharing. RISCAPE definition of research infrastructure expects them to be a) science oriented, b) accessible to researchers outside of their own organisation, c) of high scientific importance in the field, and d) have a operational time scale much longer than a typical research project. Single-sited: Research infrastructure, where majority (or all) of the services are provided in one geographical location Distributed: Distributed infrastructure has their main research activities (facilities) distributed geographically wide area. Virtual: Virtual refers to infrastructure, where the direct user access to services done completely on-line (usually data or computing). Typically these are data oriented e-infrastructures (cyberinfrastructures).
10	**If needed, you can give some additional information related to previous question on the type of your organisation**	Text		
11	**Where are your facilities located? For distributed infrastructures, what geographical area do you cover?**	Text		

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12	**Are there central facilities, and where they are located?**	Text	Central facilities can be important for defining geographical centre of operations. These are also good to determine where the main activities are located. For single-sited RIs this is non-issue, as the facility usually is the main central facility	
13	**Are there significant secondary locations outside of the main locations? If so, where?**	Text	Sometimes a single-sited or area does not make good impression of what is actually done in an infrastructure - this gives a possibility to elaborate e.g. if there is a single site, but outlying additional sites	
14	**What is the primary or main source of funding (e.g. international/national/ regional funding agency, governmental agency, user fees)**	Text	RISCAPE project also is aiming to create new collaborations between the research infrastructures. Knowing the agencies and ministries mainly responsible for the funding makes it easier for involved funding organisations to develop collaboration projects.	
15	**To estimate the scale of your organisation: If you were building your organisation today, what would be the approximate construction costs (order of magnitude estimate, 2018 terms)?**	Text	This information is only important to evaluate the overall scale of the operations,not an accurate estimate of actual value.	
16	**To estimate the scale of operations, what are the approximate total running costs of your organisation (order of magnitude, including secondments, in-kind contributions, etc.)?**	Text	To determine the approximate scale of operations, not to evaluate actual value.	

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17	**Are these operational costs 'stand alone' or or they calculated on the basis of a larger organisation within which the research infrastructure is located? Please add details** **Please choose only one of the following:** **1. stand alone** **2. larger organisation** **3. other (please specify)**	Multiple choice + text	In some cases, the "research infrastructure" is a part of a larger science performing organisation. This question is intended to help to determine are the scale of operations estimated from the infrastructure or the whole organisation.	Research Infrastructure: A science oriented service provider for researchers to do their science. Typically providing services (access) to facilities to too large or expensive to be used without sharing. RISCAPE definition of research infrastructure expects them to be a) science oriented, b) accessible to researchers outside of their own organisation, c) of high scientific importance in the field, and d) have a operational time scale much longer than a typical research project.
18	**Does your organisation have a business plan or statutes or similar document describing the goals and operations? Are they available?** **Please choose only one of the following:** **1. Business plan** **2. Statutes** **3. Both** **4. Neither** **5. Unsure**	Multiple choice + text	These kinds of documents help us to determine the type of organisation and can be useful for finding collaboration opportunities. (for non-English documents, further clarifying questions can be made afterwards)	Business plan: a comprehensive strategic plan for the organisations business, including all aspects of the operations, cost recovery etc. Statutes: founding or official documents defining the goals, and rules of the organisation. Constitution.
19	**Does your organisation have operational time horizon well beyond a typical science project in your field?** **Please choose only one of the following:** **1. yes** **2. no** **3. unsure**	Multiple choice + text	Time Horizon is necessary to identify organisations which are intended for long time operations (typical for EU research infrastructures). This is imporant to identify potential collaboration opportunities.	

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20	**Does your statutes or business plan mention a time horizon explicitly? I.e. by referring to operations relatively far in the future, or giving a long term investment roadmap?** **Please choose only one of the following:** **1. yes** **2. no** **3. unsure**	Multiple choice + text	to identify the duration of the organisation. This is one way to get the necessary information in more traceable manner.	
21	**Does your organisation have an existing long term funding decision from your main funding source? Does your organisation receipt multi-annual funding?**	Text	to determine the funding duration and current sustainability situation - this is important to determine potential collaboration opportunities. "Long term" here is the same as in the previous questions: i.e. far longer than usual science projects.	
22	**What other information can you provide to us to determine the time-scale of the organisation?**	Text	to determine the time-scale of operations	
23	**Is there a mission statement (or similar) of your organisation?**	Text	to identify the focus of the organisation	Mission statement: Short official statement of the overall mission of the organisation

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24	**Are there societal, scientific or other grand challenges do you specifically aim to respond?**	Text	To capture focus of the organisation and to find organisations with similar overarching aims	Grand challenge: Lund Declaration 2009, 2015 identifies the importance of responding to grand societal challenges (eg Ebola, migration); EC identifies seven grand challenges in H2020: 1. Health, demographic change and wellbeing; 2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy; 3. Secure, clean and efficient energy; 4. Smart, green and integrated transport; 5. Climate action, environment, resource efficiency and raw materials; 6. Europe in a changing world - inclusive, innovative and reflective societies; 7. Secure societies - protecting freedom and security of Europe and its citizens. Source: https://ec.europa.eu/programmes/horizon2020/en/h2020-section/societal-challenges Similar grand challenges are in several other fields, such as in engineering, physics, etc. The above is not meant to be limiting list, but to give examples in the European landsape - other examples are free to use, but the overall aim is to find out if there is a specific great goal (of wider interest) the organisation is aiming towards.
25	**Are there specific technical, scientific or societal problems does your organisation aims to address?**	Text	To capture the focus of the organisation and to find out potential pairings in the European landscape	

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26	**Is supporting science or performing science the key goal of your organisation?** **Please choose only one of the following:** **1. yes** **2. no** **3. Other (please specify)**	Multiple choice + text	To capture science focus	Research performing organisation: Organisation making research activities and products directly by their staff. Typical examples are universities and research centres.
27	**Which one of performing or supporting science has current priority for your organisation?**	Text	Distinguish between primarily research performing organisations and primarily research infrastructures.	
28	**Do you have a centralised (e.g. single document or a website) service catalogue for your research services? If publicly available, please provide link.**	Text	A separate service catalogue ease the analysis of services and finding cooperation opportunities. Also, several European RIs are currently building their own catalogues and examples of these would be very valuable.	
29	**What kind of research services and resources you provide for research or researchers?** **e.g.** **- Local research facilities (i.e. laboratory)** **- Mobile research instruments (i.e. mobile laboratory)** **- Remote sensing instruments (i.e. sensors mounted on aircraft, satellite, other)** **- Datasets (data archive/repository, databases other)** **- Specialised research tools or services (i.e. scientific software, data management system)** **- Computing (local supercomputer, distributed computing based on Grid/Cloud services)** **- Other**	Text	To capture the organisation services	

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30	**Technical capability** **What are the specific capabilities of your organisation? What are the significant capabilities of your organisation?**	Text		
31	**Are your operations significantly dependent on external service providers? (E.g. data transfer, data analysis, data storage)**	Text		
32	**Do you provide key services to other facilities, research infrastructures or similar?**	Text		

No	Question	Data type	Guideline for interviewer (can be shared)	Terminology / clarification
33	**What kinds of access for these services (physical, virtual, remote, or other) does your organisation provide?** **Comment only when you choose an answer. Please choose all that apply and provide a comment:** **1. Physical access** **2. Virtual access (inc. data)** **3. Remote access** **4. Other**	Multiple choice	We need to find out what types of access are there in general for this facility. Typical cases are physical, virtual/data, and remote access	Access: Access refers to the legitimate and authorised physical, remote and virtual admission to, interactions with and use of Research Infrastructures and to services offered by Research Infrastructures to Users. Such Access can be granted, amongst others, to machine time, computing resources, software, data, data-communication services, trust and authentication services, sample preparation, archives, collections, the set-up, execution and dismantling of experiments, education and training, expert support and analytical services. Physical: Physical access means direct hands-on access on the facility or service on-site Virtual: Virtual access refers to direct user access to services (usually data or computing) done completely on-line. Remote: Remote access refers to access where the actual use of the physical of virtual service is done by the request of the User, i.e. by user directly
34	**Is access mainly determined using an independent peer review process (excellence based)? Please provide details** **1. yes** **2. no** **3. unsure**	Multiple choice + text	To main access methodology	

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35	**Can you estimate the proportion of your research infrastructure's services available to external parties (i.e. those not funded by your organisation)?** **1. Less than 25%** **2. 25% to 50%** **3. 50% to 75%** **4. 75% to 95%** **5. 95% to 100%** **6. Not applicable** **7. Other (please specify)**	Multiple choice	To determine possiblity to access the services	Research Infrastructure: A science oriented service provider for researchers to do their science. Typically providing services (access) to facilities to too large or expensive to be used without sharing. RISCAPE definition of research infrastructure expects them to be a) science oriented, b) accessible to researchers outside of their own organisation, c) of high scientific importance in the field, and d) have a operational time scale much longer than a typical research project.
36	**Do you have additional quotas or limitations for external users access (i.e. researchers outside of your own organisation)?** **1. yes** **2. no** **3. Don't know**	Multiple choice	To determine service access (e.g. for European partners)	
37	**How much of the services are actually used by external parties? Does this differ by service type?**	Text		
38	**How can researchers from European organisations currently access your organisations services?**	Text	To determine potential collaboraiton possibilities	
39	**Do you have existing collaboration agreements wtih EU based research organisations? Which ones?**	Text		

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40	**Do you have an existing data policy publicly available? Can you a provide a link?** **1. yes** **2. no** **3. unsure**	Multiple choice	Data access possiblities	
41	**Do you use open licences for data produced in your organisation?**	Text	Data access evaluation	Research performing organisation: Organisation making research activities and products directly by their staff. Typical examples are universities and research centres.
42	**Is the scientific impact of research done in your facility systematically followed in some way (by you or other parties)?** **1. yes, by you** **2. yes, by third parties** **3. no** **4. Other (please specify)**		Scientific and societal impact is a major part of determining the role and position of a research infrastructure. Methods for this are developing and thus we need to collect information how this is approached	
43	**Do you have other means to demonstrate the scientific and socio-economic impact of your organisation?** **1. yes (if yes, please add details)** **2. no**	Multiple choice + text	Find the documents, for further analysis if needed. Commonly these could be evaluation reports, altmetrics, etc.	Impact study: Any consistent analysis of the impacts of the research infrastructure to scientific field and/or societal goals. Examples include through literature analyses, citation index analyses, patent listing, and societal impact analyses. Research performing organisation: Organisation making research activities and products directly by their staff. Typical examples are universities and research centres.

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44	**Do you have reports on your (scientific or societal) impact publicly available?** **1. yes (if yes, please add weblink/identifier)** **2. no** **3. unsure**	Multiple choice + text	Find the documents, for further analysis if needed	
45	**Do you have some other means to show the impact of your organisation?**	Text	Impact analyses are not available in all cases, or there might be other ways to present the overall impact and position of the RI	Research performing organisation: Organisation making research activities and products directly by their staff. Typical examples are universities and research centres.
46	**Do you collect metrics (or indicators) for scientic or societal impacts? Please give details**	Text	Determine key metrics used, their values, used in significance evaluation	Metrics are numerical indicators of use. Typically these could be the number of times facility has been referenced, citation indices, number of publications done, data downloads, etc.
47	**How do you collect user statistics of your services or organisation?**	Text	Determine key metrics used, their values, used in significance evaluation	User statistics: Quantitative data on the numbers accessing the facility, the service Research performing organisation: Organisation making research activities and products directly by their staff. Typical examples are universities and research centres.

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48	**Can you provide this information (or a link) on user statistics, number of users (per service if possible), access times, altmetrics?**	Text	Collect user statistics numbers to determine the scale of operations (for future collaboration purposes)	Altmetrics: altmetrics refer to alternative ways to follow scientific use of the resources, typically used as alternative for traditional bibliometrics. Examples include twitter mentions, data downloads, page registrations, individual IP accesses, etc. Access: access refers to the legitimate and authorised physical, remote and virtual admission to, interactions with and use of Research Infrastructures and to services offered by Research Infrastructures to Users. Such Access can be granted, amongst others, to machine time, computing resources, software, data, data-communication services, trust and authentication services, sample preparation, archives, collections, the set-up, execution and dismantling of experiments, education and training, expert support and analytical services. User: users of Research Infrastructures can be individuals, teams and institutions from academia, business, industry and public services. They are engaged in the conception or creation of new knowledge, products, processes, methods and systems and also in the management of projects. Teams can include researchers, doctoral candidates, technical staff and students participating in research in the framework of their studies.

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49	**Does your organisation exist on a current international or national roadmap (or similar prioritization document)- and what is your position in there?**	Text	Evaluate the position of the organisation based on the national prioritization, roadmap or similar status.	Roadmap: In research infrastructure terminology, a roadmap is a specific, high level document, describing the long term plans for developing and operating key shared infrastructure services for researchers. Research performing organisation: Organisation making research activities and products directly by their staff. Typical examples are universities and research centres.
50	**If applicable, please give the location of the roadmap (Web address, DOI etc.)**	Text	Provenance and further evaluation	
51	**Are there plans to add new facilities, geographically extend facilities or do major upgrades in your organisation? Can you give a time-scale?** **1. yes (if yes, please provide details)** **2. no**	Multiple choice + text	To evaluate potential for long term collaboration and common development goals, avoid duplication of effort.	
	Next questions are strongly dicipline dependent, and will most likely depend also on subdomain level interest, and in some cases even individual RI dependent. Thus, it is crucial that the person doing the information collection first evaluates what are the crucial points to bring up in here. There are only some general questions, rest must be decided by case-by-case.			
52	**Description of the European (sub)field infrastructures for complementarity** **Short description to the interviewed person on the existing European Ris which have mentioned them, or are otherwise relevant. This is needed to create discussion starting point. (This is filled by the interviewer)**	Text		

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53	**Please give details of how your organisation differs from similar European facilities?** **In Europe, there is a research infrastructure called X which specialises in these capabilities. Are you familiar with it and if so, what do you consider as the main difference in the approaches?**	Text		
54	**What kind of further collaboration with European RIs could be possible in your opinion?**	Text		
55	**Does your organisation belong to global initiatives or collaborations to solve particular challenges ?**	Text		
56	**Other questions/comments (open ended)**	Text	Whatever the interviewed person wishes to bring up	