

1.

Leitfaden für die Erstellung von Projektskizzen zur „Richtlinie zur Förderung von Zuwendungen zur Stärkung der Modellierungskompetenz zur Ausbreitung schwerer Infektionskrankheiten“

Version vom 28.05.2021

Dieser Leitfaden stellt die Anforderungen für die Erstellung von beurteilungsfähigen Projektskizzen dar. Er ergänzt die am 28. Monat 2021 im Bundesanzeiger veröffentlichte o. g. Förderrichtlinie (<https://www.gesundheitsforschung-bmbf.de/de/12910.php>). Er soll offene Fragen im Vorfeld der Einreichung klären.

Projektskizzen, die den Vorgaben der Förderrichtlinie und des folgenden Leitfadens nicht entsprechen, können ohne weitere Prüfung abgelehnt werden.

Es wird dringend empfohlen, zur Beratung mit dem DLR Projektträger Kontakt aufzunehmen. Ansprechpersonen sind:

Frau Dr. Eva Müller-Fries
Telefon: 0228-3821 1389
E-Mail: eva.mueller-fries@dlr.de

Herr Dr. Ralph Schuster
Telefon: 0228-3821 1233
E-Mail: ralph.schuster@dlr.de

Entscheidungsverfahren

Projektskizzen für einen Forschungsverbund sowie ggf. für die Einrichtung der verbundübergreifenden Koordinierungsstelle sind durch den/die Verbundkoordinator/in

bis spätestens zum 05. Oktober 2021, 23:59 Uhr (MEZ)

als ein PDF-Dokument in folgendem Portal einzureichen:

<https://foerderportal.bund.de/easyonline/reflink.jsf?m=KX-MODELLIERUNGEN&b=KX1MODEL-LIERUNGEN&t=SKI> .

Die eingereichten Projektskizzen werden durch ein unabhängiges, internationales Begutachtungsgremium bewertet.

Formale Vorgaben für die Projektskizzen

Gefördert werden können:

- **interdisziplinäre Verbundprojekte**, die innovative Modellierungsstudien zum populationsbezogenen Verlauf schwerer Infektionskrankheiten sowie die Wirksamkeit von vorwiegend nicht-pharmakologischen Interventionsmaßnahmen auf Bevölkerungsebene zur Begrenzung des Infektionsgeschehens thematisieren.
- eine **übergreifende Koordinierungsstelle**, die an einem der Forschungsverbände eingerichtet wird. Zu den Aufgaben der Koordinierungsstelle gehören die Stärkung der Zusammenarbeit der Verbände, die Initiierung und Koordinierung verbundübergreifender Querschnittsaktivitäten sowie die Kommunikation der gewonnenen Erkenntnisse.

Näheres regelt die o.g. Förderrichtlinie.

Die wissenschaftlichen Verbundprojekte sowie die Koordinierungsstelle können in der Regel für einen Zeitraum von bis zu drei Jahren gefördert werden. Kürzere Laufzeiten der Verbundprojekte mit dem Ziel, kurzfristige Ergebnisse zu generieren, sind möglich.

Die **vollständigen Unterlagen für einen Forschungsverbund** müssen folgende Teile umfassen:

- (1) die **Projektskizze** des Forschungsverbundes als ein PDF-Dokument (gemäß den Vorgaben des Leitfadens);
- (2) ein **Unterschriftenblatt**, auf dem Vertreter aller Projektpartner des Verbundes (in der Regel die Projektleiterinnen bzw. Projektleiter) mittels rechtsverbindlicher Unterschrift die Kenntnisnahme sowie die Richtigkeit der in der Projektskizze gemachten Angaben bestätigen. Diese eingescannte Seite ist in die hochzuladende Projektskizze / PDF-Datei einzubinden. Ein weiteres Anschreiben ist nicht erforderlich.

Das **unterzeichnete Unterschriftenblatt ist dann im Original innerhalb von drei Wochen nach Einreichungsfrist** an die oben genannten Ansprechpersonen und die folgende Adresse zu senden:

DLR Projektträger
Heinrich-Konen-Straße 1
53227 Bonn

Für das unterzeichnete Unterschriftenblatt in Papierversion gilt das Datum des Poststempels. **Eine Papierversion der Projektskizze muss nicht eingereicht werden.**

Mustervorlagen & Erläuterungen

Die Projektskizze ist mit Blick auf das internationale Begutachtungsverfahren **in englischer Sprache** einzureichen.

Die Projektskizze besteht aus:

- der **Beschreibung des Verbundes**,
- sowie den **Darstellungen zu jedem Teilprojekt** des Verbundes
- und ggf. einer **Darstellung der geplanten verbundübergreifenden Koordinierungsstelle**.

Die Unterlagen müssen selbsterklärend und aussagekräftig sein. Sie sollen alle notwendigen Informationen enthalten, um dem Kreis der begutachtenden Personen eine abschließende fachliche Stellungnahme zu erlauben.

Im Sinne der Vergleichbarkeit aller eingereichten Projektskizzen sind die Formatvorgaben dieses Leitfadens verbindlich einzuhalten. **Bitte benutzen Sie unbedingt die für das jeweilige Teilprojekt passende Mustervorlage, die darin vorgegebene Gliederung ist verbindlich.** Die vorhandenen Eintragungen in kursiver Schrift sind als Hinweise für die Erstellung der Projektskizze gedacht und sind vor Einreichen zu löschen.

Die folgenden Mustervorlagen stehen zur Verfügung (s. <https://www.gesundheitsforschung-bmbf.de/de/12910.php>):

- Mustervorlage für die Darstellung des Verbundes / Konsortiums (max. 10 Seiten), inklusive
 - Mustervorlage für ein Teilprojekt (je max. 10 Seiten),
 - Mustervorlage für CV (max. 1 Seite pro CV),
- Mustervorlage für die verbundübergreifende Koordinierungsstelle (max. 10 Seiten), inklusive
 - Mustervorlage für CV (max. 1 Seite pro CV).

Allgemeine Hinweise

Nachfolgende Hinweise sind bei der Planung und Einreichung der Projektskizze zu beachten.

➤ **Wissenschaftliche Standards**

Die Antragstellenden sind verpflichtet, nationale und internationale Standards zur Qualitätssicherung der Forschung sowie zur Interoperabilität und zur standardisierten Dokumentation von Daten zu beachten. Hierzu sind insbesondere die nachfolgenden Dokumente in der jeweils geltenden Fassung zu berücksichtigen (die Aufzählung ist nicht abschließend):

- Memorandum zur Sicherung der guten wissenschaftlichen Praxis (DFG),
- Memorandum III: Methoden für die Versorgungsforschung,
- Leitlinien für Gute Epidemiologische Praxis,
- Leitlinien für Gute Praxis Datenlinkage,
- FAIR Data Principles,
- Richtlinien des Council for International Organization of Medical Sciences,
- Richtlinie "Proposed International Guidelines For Biomedical Research Involving Human Subjects" (World Health Organization).

➤ **Qualität der angewendeten Methoden**

Die Generierung neuer Daten zur Schließung vorhandener Datenlücken kann in den Forschungsverbänden umgesetzt werden, so lange diese Daten in entsprechenden Modellierungen im Verbund eingesetzt werden. Die Validität der Erhebungsverfahren muss dabei in Bezug auf die gewählte Forschungsfrage gewährleistet sein. Die kontinuierliche Einbindung methodologischer Expertise in das Vorhaben muss gewährleistet sein.

➤ **Zugänglichkeit und langfristige Sicherung von Forschungsdaten und -ergebnissen**

Forschungsergebnisse, die im Rahmen dieser Förderrichtlinie entstehen, müssen unabhängig von ihrem Ergebnis publiziert werden. Die Veröffentlichung soll grundsätzlich als Open-Access-Publikation erfolgen. Originaldaten zu den Publikationen sollen zur Nachnutzung zur Verfügung gestellt werden (gemäß o. g. FAIR Prinzipien).

➤ **Weitere Voraussetzungen**

Bitte beachten Sie, dass alle in der Förderrichtlinie beschriebenen Regelungen und Voraussetzungen Gültigkeit haben. Wir empfehlen daher dringend, den Text der

Förderrichtlinie ganz genau zu lesen und zu befolgen. Ein Nichtberücksichtigen auch einzelner Regelungen kann dazu führen, dass die Projektskizze ohne weitere Prüfung abgelehnt wird.

Application Form - Interdisciplinary Research Consortium

Please prepare your application according to the guidelines outlined below. Please provide a description of the planned consortium and its coordination using a **maximum of 10 pages** including references and financial summary (**DIN A4, 11 pt Arial, single-spaced; References may be presented in a smaller font-size, but not smaller than 8 pt Arial**). The appendix - including **only CVs** (max. 1 page per CV) of the principal investigators of each subproject of the consortium - is not included in the page limit.

1 General Information on the Consortium

Coordinator	<i>The coordinating investigator of the consortium will take responsibility for managing the entire consortium.</i> <ul style="list-style-type: none"> • Academic title, first and last name • Institution and department (complete name) • Postal address • Telephone • E-mail address
Partner of the Consortium	<i>Academic title, first and last name, institution, city</i>
Title	<i>Title / name of the consortium</i>
Acronym	<i>Acronym for the consortium</i>
Topic	
Disease Entity	<i>Which infectious disease is addressed?</i>
Objective(s)	<i>Which principal research questions are addressed? Clearly specify the primary goal of the consortium. Which (main) results are expected?</i>
Duration	<i>Requested duration of funding (months); maximum 36 months.</i>
Requested Funding for the whole Consortium	

1.1 Summary

Please provide a broadly understandable summary of the main goals and methodological approach of the consortium (max. 1600 characters, including spaces). The summary will inform the multidisciplinary review committee of the principal aims of the consortium. Please write in plain speech and avoid abbreviations and technical terms.

2 Objectives, Relevance and Innovation

2.1 Objective, Overall Concept and Relevance

Describe the planned research priorities of the consortium with respect to the current state-of-the-art, outlining a clearly defined thematic focus. What is the relevance of the planned research? Please specify and discuss the choice of the focussed disease entity.

What is the expected impact? Which methodological approaches are used and / or planned to be developed further?

2.2 Novel Aspects and Future Impact

What is the novel aspect of the proposed consortium and its planned research? Which evidence gap is to be closed? Which results are expected?

Which impact will the results have on future practice of mathematical modelling, understanding of infection dynamics of the addressed disease entity or the effects of non-pharmacological interventions? If applicable, comment also on a possible international impact of the research conducted.

3 Structure of the Planned Consortium

3.1 Expertise and Previous Own Work

Describe the expertise and previous achievements of relevant partners of the consortium with regard to the addressed research topic.

3.2 Supporting Facilities

Describe the quality and scope of existing infrastructure / research platforms / service components relevant for the application.

3.3 Cooperation, Coordination and Communication

Please provide a summary of the main approaches and goals envisioned for the consortium. What approaches will be used to consolidate the contributions of the different partners? How will the exchange between the members of the consortium be achieved (e.g. regular meetings)? What mechanisms will be used for quality control and assurance? How will the results of the consortium be disseminated?

3.4 Added Value of Cooperative and Interdisciplinary Approach

Comment on the synergistic effects of interdisciplinary interaction within the consortium. Are all relevant disciplines included into the consortium to answer the research questions? How will interdisciplinary cooperation be facilitated?

For the collaboration with groups outside of the consortium (associated groups) that are essential for the implementation of the work program, please describe nature and content of the intended collaboration.

Please also describe potential themes for networking with other consortia.

3.5 Ethical and Legal Issues

How are relevant ethical and legal issues addressed? Give a description of ethical and legal considerations relating to the research.

3.6 Work Program / Milestones / Time Schedule

Define the overall work programme of the consortium and its coordination. Please describe a rough time schedule for the sub-projects of your consortium including the coordination of the consortium. In which time-frame will major work packages be achieved? Use the scheme provided for a graphical overview.

Describe major deliverable events / milestones.

No. Sub-Project	Milestone (▼)	year 1				year 2				year 3			
						▼							▼
							▼						
									▼				

3.6 Data Handling

How will responsibilities for research data quality, sharing and security be met in your consortium? Please provide a concept for measures for quality control and quality assurance. How will the data integrity and plausibility be controlled? You may refer to any institutional and study data policies, systems and procedures.

Describe what measures will be implemented to ensure data management, maintenance and long-term accessibility for future reuse of your results (also by third parties, taking into account privacy rules and proprietary data). Also mention at which stage data sharing will be ensured. Please use existing standards and data repositories where appropriate. Keep in mind that following good scientific practice the data should be available in an adequate infrastructure for at least ten years.

3.7 Financial Details of the Consortium

Please do only provide the summary of requested resources per sub-project here. A detailed justification of resources is to be provided in the template for each sub-project.

No. of Sub-Project	Principal Investigator & Institution	Title of Sub-Project	Function in the Consortium	Requested Resources incl. overhead ("Projektpauschale")
1	Prof. xx University of x	Coordination unit of the consortium for research on disease x	Coordination, Monitoring, Processing of results	xxx.xxx €
2	Dr. xy University of y	Modelling of ...	Analysis and description of genotype / phenotype correlations	xxx.xxx €
x €
Requested Resources for the Whole Consortium				

4 References

*Please list key references here (font size not less than 8 pt). For your references please use the Vancouver style (the full title of the publication must to be displayed; please find further information here: International Committee of Medical Journal Editors. Uniform Requirements for Manuscripts submitted to Biomedical Journals. NEJM 1997;336:309-15). Mark your own publications in **bold**.*

5 Appendix

Please include a CV (max. 1 page per CV) of the principal investigator of each sub-project. Other appendices are not to be included.

Application Form – Subproject within the Consortium xyz, Sub-Project No. 1, 2, 3

Please prepare your application according to the guidelines outlined below. Please provide a description of the planned research project using a **maximum of 10 pages** including references and financial summary (**DIN A4, 11 pt Arial, single-spaced; References may be presented in a smaller font-size, but not smaller than 8 pt Arial**).

1 Project Synopsis

Principal Investigator	<p><i>First name, last name, academic title Institution and department (complete name)</i></p> <p><i>In case of multiple applicants the principal investigator of the project who will assume responsibility for conducting the research project, should be listed first.</i></p>
Title of Project	
Topic	
Project Duration	<i>Requested duration of funding (months)</i>
Aim(s)	<i>Which principal research questions are to be addressed? Specify the primary goal of the project. What is the hypothesis to be tested? Which are the novel aspects of the proposed project? Which (main) results are expected?</i>

1.1 Summary

Please provide a broadly understandable summary of the main goals and methodological approach of the research project (max. 1600 characters, including spaces). The summary will inform the multidisciplinary review committee of the principal aims of the consortium. Please write in plain speech and avoid abbreviations and technical terms.

2 Objectives, Hypotheses and Evidence

2.1 Objectives and Hypotheses

What is the project aiming to achieve? What is / are the research question(s) of your sub-project? Give a concise description of your project's objectives; list them in order of priority. State your working hypotheses.

2.2 Evidence

Set your research project into perspective. This section should detail the evidence / background of the starting hypotheses of the project. Describe the relevance of the proposed research for modelling of infection dynamics of severe infectious diseases or the effects of non-pharmacological interventions on it.

3 Scientific Background

Explain the need for research in this area, and the rationale for the particular lines of research planned. Give sufficient details of other past and current research to show that the aims are scientifically justified, and to show that the work will add distinct value to what is already known, or in progress.

4 Research Design & Workplan

4.1 Justification of Design Aspects

Do not only describe but justify the approaches, designs and techniques that will be used.

If applicable, please describe and justify the experimental procedures, primary and secondary experimental outcomes assessed, total number of subjects / samples used in the experiment and in each experimental group, quality control / methods against bias (e.g. randomisation or matching) and / or gender aspects to be addressed regarding the research question.

Some of these aspects may not apply to your research. Please focus only on those aspects that are relevant for your particular research question.

4.2 Methods of Analyses

Do not only describe but justify the approaches and techniques that will be used.

If applicable: What is the proposed strategy of (statistical) analysis? Provide details of the (statistical) methods used for each analysis. Justify any methods used. Specify the unit of analysis for each dataset (e.g. single subject / sample, group of subject / samples)? How will missing data be handled statistically?

Some of these aspects may not apply to your research. Please focus only on those aspects that are relevant for your particular research question.

4.3 Work Packages

Explain your work plan in detail. Define and describe work packages. Which tasks will be done? How will the aims be reached?

4.4 Milestone Plan

Indicate work packages (WP) into which the project is divided and schedule events that indicate the completion of major deliverables. Milestones are measurable / observable events and serve as progress markers. Numbering of work packages should be identical in sections 4.3 and 4.4.

No. of WP	Milestone (▼)	year 1				year 2				year 3			
					▼							▼	
								▼					
										▼			

5 Team and Expertise

5.1 Major Participants

Please indicate persons responsible for design, conduct and analysis of the project.

#	Name	Affiliation	Role
			Principal investigator
			Methodological expertise
		

Ensure that the team of participating investigators has the necessary range of disciplines and expertise to carry out the proposed project.

5.2 Supporting Facilities

Which specific facilities and other resources are available for conducting the proposed research project?

6 Dissemination

Discuss dissemination of results, especially beyond regular journal publication.

7 References

Please list key references here (font size not less than 8 pt). For your references please use the Vancouver style (the full title of the publication must to be displayed; please find further information here: International Committee of Medical Journal Editors. Uniform Requirements for Manuscripts submitted to Biomedical Journals. NEJM 1997;336:309-15). Mark your own publications in **bold**.

8 Financial Summary

Please detail and justify the costs for the entire funding period.

Item	Months ¹⁾	Salary Group	Detailed Description	Requested Resources
Personnel				€ ²⁾
Scientific				€ ²⁾
Non- Scientific				€ ²⁾
Other				€ ²⁾
Consumables ³⁾		n.a.		€ ²⁾
Subcontracts		n.a.		€ ²⁾
Travel		n.a.		€ ²⁾
Total				€ ²⁾
Overhead („Projektpauschale“)				€ ²⁾
Requested Resources (incl. overhead)				€ ²⁾

¹⁾ Please indicate full-time equivalents.

²⁾ Please use thousands separator.

³⁾ Equipment cannot be funded. Publication costs can only be funded if an open access publication is planned.

Template for a CV

Please prepare all CVs according to this template. Please include the CVs of all principal investigators / subproject leaders.

*For all CVs, please use a **maximum of 1 page (DIN A4, 11 pt. Arial, single-spaced; References may be presented in a smaller font-size, but not smaller than 8 pt Arial).***

Personal information
<i>First name, last name, academic title</i>
<i>Institution and department (complete name)</i>
Current position
Position in the consortium
Work experience relevant for the consortium
Professional background
Publications
<i>Please list your five most relevant publications of the last ten years</i>
Additional information
<i>Please list your five most relevant publications of the last ten years</i>

Application Form – Coordination Office for all Consortia

Please prepare your application according to the guidelines outlined below. Please provide a description of the planned coordination office of all consortia within the network using a **maximum of 10 pages** including references and financial summary (**DIN A4, 11 pt Arial, single-spaced; References may be presented in a smaller font-size, but not smaller than 8 pt Arial**). The appendix - including **only** a CV (max. 1 page) of the principal coordinator- is not included in the page limit. If the principal coordinator of the coordination office is identical with one of the principal investigators of the consortium, the CV has not to be provided again.

1 General Information on the Coordination Office

Principal Coordinator	<ul style="list-style-type: none"> • Academic title, first and last name • Institution and department (complete name)
Objectives	Which are the main goals of the coordination office.
Duration	Requested duration of funding (months); maximum 36 months.

1.1 Summary

Please provide a broadly understandable summary of the main goals and methodological approach of the coordination office of all consortia (max. 1600 characters, including spaces). The summary will inform the multidisciplinary review committee of the principal aims of the coordination office. Please write in plain speech and avoid abbreviations and technical terms.

2 Concept

2.1 Objective and Concept for the Coordination Office

Please explain your concept for the coordination office of all consortia comprehensively and in detail and consider especially the buildup, organization and management of the coordination office, staff and methods.

Please describe detailed concepts for the following main tasks of the coordination office: standardization and coordination of methods, interdisciplinary exchange of network partners, communication and public relations, organization and realization of scientific events, support for the exchange and effective use of data. Further tasks may be considered.

What approaches and methods will be used to fulfil these tasks? What approaches will be used to consolidate the contributions of the different partners?

Dissemination of Results and Implementation: Please outline intended measures to disseminate the results beyond the academic population, the actors involved, patients / consumers. Please comment in particular how the general public will benefit from the research of your consortium.

Data Handling: How will responsibilities for research data quality, sharing and security be met in your consortium? Please provide a concept for measures for quality control and quality assurance. How will the data integrity and plausibility be controlled? You may refer to any institutional and study data policies, systems and procedures.

Describe what measures will be implemented to ensure data management, maintenance and long-term accessibility for future reuse of your results (also by third parties, taking into account privacy rules and proprietary data). Also mention at which stage data sharing will be ensured. Please use existing standards and data repositories where appropriate. Keep in mind that following good scientific practice the data should be available in an adequate infrastructure for at least ten years.

2.2 Supporting Facilities

Describe the quality and scope of existing infrastructure / research platforms / service components relevant for the coordination office of the network.

2.3 Added Value

What is the added value of having a centralized coordination office for the consortia of the network?

2.4 Expertise and Previous Own Work

Describe the expertise and previous achievements with regard to coordinating a network of partners.

3 Structure of the Coordination Office

3.1 Work Packages

Explain your work plan in detail. Define and describe work packages. Which tasks will be done? How will the aims be reached?

3.2 Work Program / Milestones / Time Schedule

Define the overall work programme of the consortium. Please describe a rough time schedule for the sub-projects of your consortium. In which time-frame will major work packages be achieved? Use the scheme provided for a graphical overview. Describe major deliverable events / milestones.

No. Sub-Project	Milestone (▼)	year 1				year 2				year 3			
					▼								▼
								▼					
										▼			

3.3 Financial Details

Please do only provide the summary of requested resources per sub-project here. A detailed justification of resources is to be provided in the template for each sub-project.

No. of Sub-Project	Principal Investigator & Institution	Title of Sub-Project	Function in the Consortium	Requested Resources incl. overhead ("Projektpauschale")

1	<i>Prof. xx University of x</i>	<i>Coordination unit of the consortium for research on disease x</i>	<i>Coordination, Monitoring, Processing of results</i>	<i>xxx.xxx €</i>
2	<i>Dr. xy University of y</i>	<i>Modelling of ...</i>	<i>Analysis and description of genotype / phenotype correlations</i>	<i>xxx.xxx €</i>
X	<i>...</i>	<i>...</i>	<i>...</i>	<i>... .. €</i>
Requested Resources for the Whole Consortium				

4 References

*Please list key references here (font size not less than 8 pt). For your references please use the Vancouver style (the full title of the publication must to be displayed; please find further information here: International Committee of Medical Journal Editors. Uniform Requirements for Manuscripts submitted to Biomedical Journals. NEJM 1997;336:309-15). Mark your own publications in **bold**.*

Template for a CV

Please prepare all CVs according to this template. Please include the CVs of all principal investigators / subproject leaders.

For all CVs, please use a maximum of 1 page (DIN A4, 11 pt. Arial, single-spaced; References may be presented in a smaller font-size, but not smaller than 8 pt Arial).

Personal information
<i>First name, last name, academic title</i>
<i>Institution and department (complete name)</i>
Current position
Position in the consortium
Work experience relevant for the consortium
Professional background
Publications
<i>Please list your five most relevant publications of the last ten years</i>
Additional information
<i>Please list your five most relevant publications of the last ten years</i>