$\frac{\text{Specially Promoted Research 2} - 1 - (\)}{\text{S} - 1 - 1 \ (2)} \quad \text{Project Description File} \quad \text{(Japanese version) (items in the attached file)}$

Purpose of the Research
The applicant should indicate the general idea of the research and the specific purpose of the research clearly and specifically with the literature referred to as needed. The following points should be highlighted. (Please refer to the "Rules on Screening and Assessment for Grants-in-Aid for Scientific Research", when describing these items.) 1) What will be elucidated and to what extent will it be pursued during the research period 2) The scientific features, originality and expected results and significance of the research (project) in the area 3) Positioning of the research (project) in related domestic and overseas research 4) Differences from the present research project, if any research funding other than KAKENHI is continuously received for another continued research project in FY2013 (research funding by any ministry/office, local public organization, research funding corporation, private corporation or other bodies) 5) The specific purpose of the part the Co-Investigator (kenkyū-buntansha) is in charge of (in case the applicant entered items of work allotted in the section "Roles" of the Application Information (to be entered in the Website))

Necessity of the Research
State the necessity and positioning of research in the light of the following: 1) State of progress of the research area as background of the research [the current state and trends in domestic and overseas research, contribution of the applicant (international rating of research achievements)] 2) The innovative character of the research and how it was inspired 3) Expected research achievements, scientific significance and impact 4) Reasons why an application is made for Specially Promoted Research and urgency of the research

		rticles of applicant h		researchers	in whi	ch earlier	research
The applicant research paper	should describe corrs/articles of other r	ncisely how his/her researchers in which	earlier research the earlier res	h achievements are research achievements of article), and how they	of the applicant		
			r				

Research Plan and Methods

The applicant should provide details of the research plan and the methods for achieving the objectives of the research in a clear and specific manner. The plan should be divided into one for FY2013 and one for FY2014. The existing academic literature should be referred to as needed and the plan and methods should indicate results through a discussion from multiple aspects, such as the action in the event that the research does not progress as originally planned.

Where the research plan is being implemented by a group, indicate the specific roles of the Principal Investigator and Co-Investigators (kenkyu-buntansha) (using figures, tables and other visual aids). In case the research plan is being implemented together with Co-Investigators (kenkyu-buntansha), include the necessity and rationality of the project members, and the connection to the purpose of the research from the scientific viewpoint.

Moreover, in order to clearly indicate the general view of the research team, state the roles of Co-Investigators (*renkei-kenkyusha*) and Research Collaborators [overseas co-researchers, company-employed researchers not eligible to apply for KAKENHI, graduate students and others (the names and the number of members may be stated)].

Moreover, if the research environment changes significantly halfway through the research period, the applicant should also describe the way how the location of the implementation of the research is secured, research implementation methods, etc.

State of Preparations for the Research Project and Methods to Disseminate Research Results to Society and Citizens	the
The following points should be highlighted and stated in a clear, specific manner: 1) The current state of research environment, such as research facilities, equipment and materials that are used for the implementation the research 2) The state of preparation for starting the research, such as coordination and contact with Co-Investigators (kenkyu-buntansha), applicable (This should also be stated as appropriate in the event there are Co-Investigators (renkei-kenkyusha) and/or Research	if
Collaborators.)) 3) The methods and other ways of disseminating the research results of the current research to society and citizens	J

Research Funding Received and Achievements
State the achievements of funded research that is being effectively used for planning the current research from the grants that the Principal Investigator/Co-Investigator (kenkyu-buntansha) has received (including KAKENHI, research funding provided by his or her research institution, research funding paid by any ministry/office, local public organization, research promotion corporation, private corporation and any current research funding). Classify the grants into KAKENHI and other grants. The following should be taken into account: 1) For each research funding, state the research category (name of the system for research funding other than KAKENHI), period (fiscal year), title of the research project, whether the applicant is the Principal Investigator or Co-Investigator (kenkyu-buntansha), eligible costs of the research. Also give a clear statement of the research achievements and interim and after-the-fact assessment results (only to be made by the funding organizations). If there are research progress assessment results for KAKENHI in the FY2011 or in FY2012, the applicant should describe them in the section "Connection between the Research Plan and the Research Project which received a Research Progress Assessment" in Specially Promoted Research 2-7. 2) Distinguish between KAKENHI and other research funding.

Connection between the Research Plan and the Research Project received a Research Progress Assessment	which
 In this section the Principal Investigator of the current application should describe it if he or she received a research progress assessment as a Principal Investigator of "Specially Promoted Research", "Scientific Research (S)", "Grant-in-Aid for Young Scientists (S)" or "Grant-in-Aid for Creative Scientific Research" in FY2011 or in FY2012. In this section the applicant should describe the connection between the research plan and the research project which received a reprogress assessment (answering questions like what connection is there, how to develop the research which received a research prassessment specifically, and other matters). 	search

Specially	Promoted	Research 2	-8 -	()
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The applicant should fill in this section only if he or she wishes to reconstruct her/his research plan as an application for the fiscal year before the final fiscal year of a research plan (cf. procedures for application). In other cases it is not necessary to fill it in.

Entries when Applying for a Grant for the Final Year of a Research Plan

In this section the applicant should describe the research achievements, such as new knowledge and other matters, attained in the original research plan of the continued research project he or she is conducting as a Principal Investigator and of which FY2013 is the final fiscal year. He or she should describe the reasons (state of the development of the research, justification of the budget, etc.) why he or she is applying for the current research and why he or she is reconstructing his/her original research, based on the development of the original research. (Moreover, research achievements of the continued research project that are described in this section should not be described in the section "Research Funding Received and Achievements" in Specially Promoted Research 2-6.)

Research	Screening Division	Project Number	Title of the Research Project	Research Period
Category	DIVISION	Number		
				From to
				FY2013

Research	Screening	Project	Title of the Research Project	Research Period
Category	Division	Number		
				From to
				FY2013
Initial Reseau	ch Plan and	Research Ach	nievements	
Reasons for A	Applying			

Protection of Human Rights and Compliance with Laws and Regulations (see procedures for application)
In this section, the applicant should describe the measures and action that he or she will take, if his/her research involves compliance with the related laws and regulations, such as research requiring the consent and the cooperation of the other party when executing the research plan, research requiring consideration for the handling of personal information and research requiring efforts regarding bioethics and safety measures. This applies to surveys, research, experiments which require an approval procedure in an ethics committee inside and outside the research institution, such as for example questionnaire surveys in which personal information is involved, interview surveys, the use of provided samples, analysis of the human genome, recombinant DNA experiments, experiments on animals, etc. Please indicate where this is not applicable.

Research Facilities and Equipment Currently Used

Research Facilitie	S (See the procedures for preparing	and enterin	g the proposal for grant-	in-aid for Speci	ally Promoted Re	search.)
Research Institution	Name of Facilities (A	Exclusive or Joint Use		Remarks		
	ently Used (major existing preparing and entering the proposal f			ted Research.)		
Research Institution	Name of Equipment		cations (type and erformance)	Exclusive or Joint Use	Year of Installation	Remarks

Rationality and Justification of the Research Costs

Statement of Costs for Equipment

Rationality, Justification and Other Matters

In this section, the applicant should fill in the budget for each item of expense, based on the scale and the organization of the research and other matters mentioned in the section "Research Plan and Methods" in Specially Promoted Research 2-4, and should then describe the rationality, justification and grounds for the total amount. A deliberation on the optimum scale and budget of the research will be conducted in the screening panel. Therefore, the applicant should specifically enter important items and expensive items (for example, in the case of expensive equipment, reasons why its performance is necessary for the research and the reasons why the currently used equipment cannot be used (whether jointly or not), in the case of expensive consumables, the way how the money is actually used and the adequacy of the quantity and price, in the case of personnel expenditure and remuneration). Moreover, if the total amount of the research budget applied for exceeds 500 million yen, the applicant should fill in the rationality and justification in the section "Reason why the total budget applied for exceeds 500 million yen" in Specially Promoted Research 2-13

Moreover, if, in any fiscal year of the research project, any item of expense (equipment, travel expenses, and personnel expenditure and remuneration) exceeds 90% of the entire research budget, or if there is any other predominant item of expense in "Miscellaneous", the applicant should provide a justification for the cost (for example by providing a breakdown).

If the applicant is purchasing many books and materials, he or she should enter details, such as "books relating to politics during the Middle
Ages in the West", in such wording that the contents of the books and materials becomes clear. For machines and tools, not only the type bu
also the breakdown of each set should be stated. If the applicant needs equipment in the last fiscal year, he or she should also fill in the reason
in the section for the last fiscal year. In the section "Fixed Price / Estimation", the applicant should fill in concisely the fixed price or the
estimated price, in a way that clarifies the ground for the amount, such as for example by mentioning the percentage proportion of the fixed
price to the estimation

)							(Unit: Thousands of yen)
Year and Month when Purchase is Planned	Preferred Order of Purchase	Item and Specifications	Qty	Unit Price	Amount (¥)	Fixed Price / Estimation	Researcher as the main user and institution where the items will be used
FY2013 Month:							
		Total	1				
	, sasmication	n and Other Matters				,	
FY2014 Month:							
Month:							
		Total					

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Year and Month when Purchase is Planned	Preferred Order of Purchase	Item and Specifications	Qty	Unit Price	Amount (¥)	Fixed Price / Estimation	Researcher as the main user and institution where the items will be used
FY2015 Month:							
	7 10 1	Total					
Rationality	y, Justification	n and Other Matters					
FY2016 Month:							
		Total					
Rationality	y, Justification	n and Other Matters					
FY2017 Month:		Total					
Rationality	y, Justification	n and Other Matters			<u> </u>		-

	atement of Costs				ems in-aid for Specially Promot	ted Research.)	(Unit: Thousa	ands of yen)
Year	Consumat	bles	Travel Ex	rpenses	Personnel Expenditure a	and Remuneration	Miscellan	neous
Fiscal Year	Item	Amount	Item	Amount	Item	Amount	Item	Amount
			(Domestic)					
FY2013			(Overseas)					
	Total	 	<u> </u>	-	-			
Kauo	onality, Justificati	lon and Or	(Domestic)			T		
FY2014			(Overseas)					
ļ!	Total							
Ratio	onality, Justificati	ion and Ot	her Matters					

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Fiscal Year	Consumab	bles	Travel Ex	kpenses	Personnel Expenditure	and Remuneration	Miscellan	neous
Fiscal	Item	Amount	Item	Amount	Item	Amount	Item	Amount
			(Domestic)					
015								
FY2015			(Overseas)		_			
	Total						,	
Ratio	onality, Justificati	ion and Ot	ther Matters					
								I
								I
								l
\vdash			(Domestic)					
							l	
16							1	
FY2016					 -		1	
ц			(Overseas)				1	
							<u> </u>	
Datic	Total onality, Justificati	ion and Of	thar Matters	.l			1	
Namo	Manty, Justineau	.Oli and ox	Her iviancis					
			 		<u>. </u>			
			(Domestic)				l	
017								
FY2017	!		(Overseas)	+	_			
	Ī						l	
	Total				1			
 Ratio	onality, Justificati	ion and Ot	ther Matters	,1	.1	_l1	·	
	•							

Reason why the total budget applied for exceeds 500 mil	lion yen
In this section the applicant should explain specifically the reason why he or she cannot conthe rationality and justification for exceeding 500 million yen, only if the total amount of 500 million yen, which is the guideline for the upper limit of the application.	omply with the 500 million yen limit and f the research budget applied for exceeds

Name of the	Specially Promoted Research $2 - 1 4 - ()$
Researcher	

Application for Research Funding, the Current State of Funding and Effort

Since this section is the part that will be used for reference during the screening process when judging whether the research project will be able to be sufficiently implemented without causing unreasonable duplication or excessive concentration of research funding. It is necessary that the applicant correctly states the budget for the proposed research project that he or she receives and uses. The applicant should take into consideration the following points and enter (1) the research funding applied for, (2) the research funding to be provided and (3) other activities at the time of application by the Principal Investigator and the Co-Investigator(s) (kenkyū-buntansha). For the exact method for filling in the necessary data, the applicant should verify the procedures for preparing and entering the proposal for grant-in-aid for Specially Promoted Research.

- 1. In the section "Effort" the applicant should fill in a percentage of time allocation (%) necessary for the implementation of the research if the entire yearly working time is set at 100%.
- 2. In the beginning of the section "Research Funding Applied For", the applicant should enter the research project he or she is currently applying for.
- 3. In the case of a grant-in-aid for scientific research for "Scientific Research on Innovative Areas (Research in a proposed research area)" or "Scientific Research on Priority Areas", the applicant should state whether it is "planned research" or "invited research".
- 4. The applicant should include research funding to be competitively provided by the research institution to which he or she belongs.
- 5. In the section "Connection between the Research Project Currently Applied for and the Original Research Project", the applicant should state the reasons for I, II and III specifically and clearly.
- 6. If the applicant is participating in project research conducted in line with a specific purpose (mission) of the research institution to which he or she belongs, he or she should also enter the research funding that is delivered.
- Moreover, if the research funding that is delivered to each individual is not clear, the applicant should make a statement to this effect in the section "I. Differences in the Content of the Research".

(1) Research Funding Applied For Connection between the Research Project Currently Applied for Budget for FY and the Original Research Project Funding System / Name of Title of Proposed I. Differences in the Content of the Research Roles Project (Name of the Effort the Research Funding (throughout the II. Reason(s) for the Application for the Current Research PI/ period) (in (Research Period / Name Principal (%) Project in Addition to the Original Research Project Co-I(s)) thousands of of the Funding Institution) Investigator) (In the case of a Principal Investigator of a KAKENHI (or a researcher who receives the grant for the yen) whole program, like, for example, the Project Leader), the amount to receive for the whole research period (or for the whole program) should be entered) Research Project Currently Applied For "Specially Promoted Research' () (2013-20__) (total budget in thousands of ven) T (total budget in thousands of ven) Π () (total budget in thousands of ven) Π)

Application for Research Funding, the Current State of Funding and Effort (Continued)					
(2) Research Fu	nding to be Pr	<u>ovi</u> de	d		
_	Project (Name of the Principal	Roles (PI / Co-I(s))	Budget for FY 2013(throughout the period) (in thousands of yen)	Effort (%)	Connection between the Research Project Currently Applied for and the Original Research Project I. Differences in the Content of the Research II. Reason(s) for the Application for the Current Research Project in Addition to the Original Research Project III. Reason(s) for Withdrawal from the Research Currently Implemented ("Scientific Research on Innovative Areas", "Scientific Research on Priority Areas", "Scientific Research", "Challenging Exploratory Research", "Grant-in-Aid for Young Scientists") and Conducting of Research Currently Applied For
					I
					п
					III
					I
					П
					ш
(3) Other Activities The applicant should enter the effort for research activities and educational activities that are carried out as work other than the aforesaid research activities carried out by means of research funding			other than the	100	
Total (Total of the effort in (1), (2) and (3) above)				(%)	

Reason(s) why screening by an overseas researcher is not appropriate
As a general rule, the preparation of a written opinion of the screening panel by overseas researchers will be requested for all research projects of the category "Specially Promoted Research". However, if the applicant judges that it is not appropriate to request it (i.e. if he or she selected "Not appropriate" in the section "Appropriateness of screening by an overseas researcher" among the items of application information to be entered in the Website), he or she should enter the specific reasons for this. Moreover, a deliberation on the appropriateness of these reasons will be conducted in the Scientific Research Grant Committee.