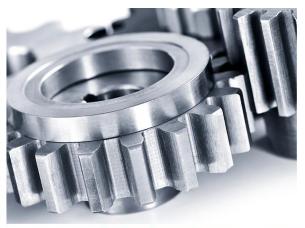


HANDBOOK FOR PROJECTS WITHIN **SIP-METALLIC MATERIALS 2019**

















Med stöd från





FORMAS :

Strategiska innovationsprogram



FOR PROJECTS IN SIP METALLIC MATERIALS

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FOR PROJECTS IN SIP METALLIC MATERIALS

1 OVERALL DESCRIPTION

This project manual describes a project management model that Jernkontoret originally developed based on the quality standard SS - ISO 10006 (Management system for quality - Guidance for quality management in projects) and which is applied within the strategic innovation program Metallic Materials. The model is intended to facilitate both the project work and the overall management, administration and follow-up of the project. It describes the different phases and roles within a research project and gives guidelines for documentation of the project's planning, implementation and reporting of results. A number of templates for different project documents have been developed and are available in the appendices.

A project is divided into four phases:

- Start-up
- Project work
- Completion
- Implementation of the results

There are three key decision points:

- Approval of the Project Plan
- Approval the Phase 1 report
- Approval of the Final report

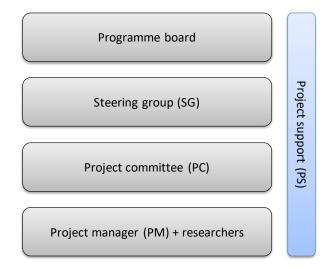


Fig. 1. Schematic illustration of different roles in a project



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2 ORGANIZATION AND ROLES

2.1 Programme Board

The Programme Board is responsible for ensuring that the programme description drawn up by the parties (Vinnova, Jernkontoret, Swedish Aluminum and the Swedish Foundry Association) is implemented.

The board has one representative each from the three original programme organisations, as well as a representative from the instigators of the InnovAT agenda, which was added to the programme after it started. These four designate two additional members, one of whom has an industrial background and the other a background from academia or a research institute. A representative from Vinnova is co-opted to the board.

Since Jernkontoret is the legal programme owner, Jernkontoret's representative is the Chairman of the Board.

To fulfil its mission, the Board has appointed the Agenda Council, which constitutes a reference group / preparatory body.

The Board also appoints Steering Groups for each project within the programme. In projects with a shorter duration than one year, the Board may choose not to appoint a Steering Group.

The Programme Manager, who leads the Programme Office, where the practical work with the programme is carried out, also reports to the Board.

The decisions made by the Board include:

- Determining the budget for the programme's various initiatives
- Implementation of calls
- Implementation of generic projects
- When relevant, recommendations to Vinnova regarding project proposals submitted within calls
- Appointment of members to the Agenda Council

2.2 Agenda Council

The Agenda Council is advisory to the Programme board and thus also to the Programme Office and has two main tasks

1. Ensure that the programme initiatives (calls for proposals, generic projects and possibly other initiatives) are in line with the strategic agenda.



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2. Communicating information about and from the programme to relevant networks, as well as from the networks to the programme.

The Agenda Council makes recommendations to the Programme Board about calls for proposals and comments to Vinnova on submitted proposals. The Agenda Council decides whether proposals for generic projects are to be prepared, and if prepared such proposals are submitted to the Programme Board for decision.

The Agenda Council has 21 members, appointed by the Programme Board for one year at a time. Eight members are from the steel area, four each from casting and machining and three from aluminum. In addition, two members must have experience from public research funding. In appointments the Programme Board shall strive to achieve a balance between different competencies as well as between industry and academia / institutes, as well as gender and age.

2.3 Programme Manager / Assistant Programme Manager

The Programme Manager is responsible to the Programme Board and Vinnova for the programme's implementation and represents the programme externally. The Programme Manager convenes and is the rapporteur to the board and is responsible for implementing decisions taken. The Programme Manager is responsible for the day-to-day operations of the programme and is assisted by the assistant programme manager. The legal programme owner is Jernkontoret.

2.4 Steering group (SG)

The Steering Group has a delegated responsibility from the programme to oversee the project and to exercise parts of the quality control that is incumbent on the programme. The Steering Group is appointed by the Programme Board for each project and shall consist of at least three members. The Project Committee (see below) may propose members to the Steering Group, preferably persons from the companies that are managers of the members of the Project Committee. When appropriate, the relevant Technical Area within Jernkontoret or a group within the Swedish Foundry Association or Svenskt Aluminium may be appointed as Steering Group. The Steering Group holds minuted meetings and has the following tasks:

- Review and approve the project plan (chairman signs)
- Monitor that the project follows the project plan and maintains a reasonable balance use of project grant and industrial contributions
- Approve the project's Phase reports and final reports

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- Receive notification of Project Results for which one or more project partners intend to seek intellectual property right protection according to project consortium agreement
- Approve significant changes in the project plan and, in collaboration with the Project Support, ensure that Vinnova's approval is obtained prior to changes in the project if these are so extensive that this is required

2.5 Project support (PS)

Project Support is designated by the Programme Office for each project. The Project Support tasks include:

- 1. Present the programme and the conditions at the start meeting.
- 2. Assist the project in the event of delays and other problems.
- 3. Include the project in overall analyses of the relevance to the programme's overall goals, impacts, finances and connection to Strategic Agenda etc. which are prerequisites for the implementation of the programme.
- 4. Inform about programme activities
- 5. Include the project in the programme's communication including www.metalliskamaterial.se.
- 6. Check that essential project documents are stored in PIAplus.
- 7. Maintain an overview of project deliverables compared to the project application / plan, also the balance between use of the grant and industrial contributions. Report to the steering committee and the programme manager if significant deviations occur.
- 8. Provide recommendations for the preparation of reports and submit these to the Steering Group for approval.
- 9. Convene the project's Steering Group and participate actively in Project Committee meetings.
- In addition, the Project Support should:
- Propose a project committee chair in consultation with the Project Committee
- Ensure that the start-up meeting within the Project Committee is held as soon as possible after the proposal is approved for funding.
- Assist with drawing up of a consortium agreement.
- Support the Project Manager and Project Committee chair in project work.
- Contribute knowledge and experience to the project.
- Be prepared in case of serious problems to stop planned work within the project until an updated project plan has been approved by the Steering Committee and Vinnova and report any such case immediately to the Programme Manager.
- Ensure that the final report is distributed and conduct evaluation and feedback after the completion of the project.



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2.6 Project Committee (PC)

The operational work within the project is usually led by a Project Committee, which consists of representatives of participating companies and research organisations. Normally each project partner appoints one member who is entitled to vote in the Project Committee, in addition, additional representatives can be co-opted. If a project partner replaces its representative, the other members of the project committee must be notified immediately. The Project Support is included with voting rights.

The tasks of the Project Committee are to:

- Take responsibility for running the project in accordance with the application, the funding decision and the consortium agreement.
- Contribute to establishing the project plan and approving it.
- Add knowledge and experience to the project.
- Make decisions about changes to the project plan, which, if necessary, are also approved by Vinnova.
- Ensure that the companies' industrial contributions follow the plan and actively participate in these.
- Take responsibility for implementation of project results. Implementation proposals must be included in the final report.
- Contribute to feedback from the project to the programme, for example via feedback surveys.

The industry representatives are also responsible for:

- Internal communication about the project in their respective companies.
- Continuous documentation of industrial contributions to the project.
- Implementation of the project results within their own operations

2.7 Chairman of the Project Committee

A company representative is normally be appointed chairman of the Project Committee, especially in cases where the Project Manager comes from a research organisation. The chairman's duties are to

- Represent the Project Committee's collective industrial interest in the project
- Lead the Project Committee and in cooperation with the Project Manager be responsible for ensuring that committee meetings are held according to plan

2.8 Project Coordinator

The Project Coordinator is the legal entity responsible for the project towards Vinnova. The coordinator is responsible for carrying out the work according to the proposal and also receives and distributes Vinnova's funding to the other project partners and reports all project partners' costs to Vinnova.



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2.9 Project Manager (PM)

The Project Manager is appointed by the coordinator and is normally but not necessarily a person who is employed by the Coordinator. The Project Manager is named in the application to Vinnova. The Project Manager should:

- Convene a start-up meeting in the project as soon as possible after funding has been granted in consultation with the Project Support
- Convene project meetings in consultation with Project Committee chair
- Formulate the project plan together with the Project Committee
- Lead the project according to project plan and within the framework of the project budget
- Ensure that necessary formal decisions about changes within the project are made by the Project Committee / Steering Group
- Take action when deviations from the project plan occur
- Be responsible for the operational coordination of the project work
- Represent the project to the stakeholders on behalf of the Project Committee or Programme Manager
- Be responsible for communication with project stakeholders according to Communication and publication plan.
- Be responsible for preparing status reports, detailed technical reports Phase and Final reports for stakeholders, the Project Committee, the Steering Group, the Programme Board and Vinnova
- Be the rapporteur to Project Committee meetings and if required also report to meetings of the Steering Committee

If necessary, the project is divided into subprojects with subproject managers who are responsible for a defined part of the project.

3.10 Project members

The project allows a large number of people to participate. These may be from a research organisation, eg. a research institute or university, an industrial or consulting company.

Project members

- perform work in the project, individually or in groups
- report to the Project Manager / sub-project manager and sometimes to the Project Committee

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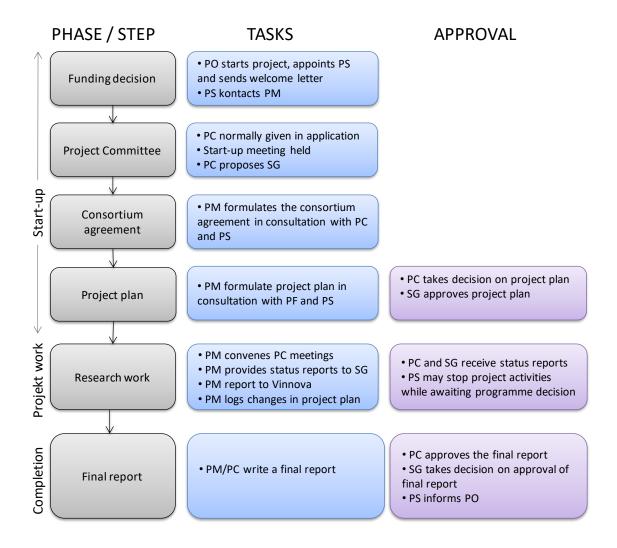


Fig. 2. Schematic illustration of project phases, documentation and decisions.

 $PM = Project\ Manager$

PC = Project Committee

SG = Steering Group

PS = Project Support



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3 DESCRIPTION OF ROUTINES

These routines are applied once funding of the project has been granted.

Start-up

3.1 Creating a project site

The programme office is responsible for registering the project and the members of the project committee in Jernkontoret's project management system PIAPlus. Meeting documents, minutes, reports etc. are stored in PIAPlus, normally by the project manager.

3.2 Appoint the Steering Group

The programme board appoints the Steering Group for the project. Proposals are usually made by the Project Committee. When appropriate, the relevant Technical Area within Jernkontoret or a group within the Swedish Foundry Association or Svenskt Aluminium may be appointed as the Steering Group.

3.3 Confirm the Project Committee

The Project Committee is normally designated in the project application and is confirmed at the start-up meeting. The chair of the project committee is appointed within the project committee.

3.4 Hold the start-up meeting

The Project Manager, in consultation with the Project Support, sends out an invitation to the start-up meeting with the Project Committee. the project committee chairman leads the committee work. Agenda items can be found in Appendix 3.

3.5 Sign the Consortium Agreement

Projects within SIP Metallic materials usually have a Consortium Agreement; this is normally also a requirement from Vinnova. The consortium agreement regulates the interrelation between the project partners. For example, the work of the Project Committee is described here as the body whereby the project partners control the work of the project. The sooner the partners can agree on a Consortium Agreement agreement, the better. Ideally the partners should agree on issues such as rights and publication even before the application is submitted. In this handbook, signing of the Consortium Agreement is included as part of the project routines and because it is the most common procedure.

The Consortium Agreement should include all items in Appendix 2. A number of templates are available on the Metallic Materials website www.metalliskamaterial.se, from simple agreements to those with regulated processes for managing ownership of project results. Most of the projects use one of these templates, but the project partners are free to adapt the templates to their own needs or use other types of agreements.

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3.6 Formulate the detailed Project Plan

The Project Manager prepares a project plan in consultation with the Project Committee; the Project Support assists in the work. Note that all headings in the project plan template (Appendix 1) should be used to ensure that goal formulation, resource planning, risk analysis, communication and stakeholder management are included. If a project plan cannot be established within a reasonable time, the Steering Group must be contacted.

3.7 Approve the Project Plan

The Project Committee decides on the project plan, which is then signed by the project committee chairman. Subsequently, the project plan is approved by the Steering Group. When the project plan is approved, the start-up phase ends.

Project Work

3.8 Hold project meetings

The project committee chair is responsible for ensuring that meetings with the Project Committee are held at intervals according to the meeting, communication and publication plan (see project plan). Notices can be sent through Jernkontoret's project management system PIAPlus. Meetings must be recorded in minutes which include decision taken. Items for the agenda can be found in Appendix 3.

3.9 Hold Steering Group meetings

The Steering Group holds meetings at intervals according to the meeting, communication and publication plan, or additional meetings if required. Project support is convening and presenting at steering group meetings but can be assisted by the project manager and / or the chair of the project committee. Items for the agenda can be found in Appendix 4.

3.10 Communicate with stakeholders

The meeting, communication and publication plan (see project plan) defines communication with the project's stakeholders. The industry representatives in the project committee are responsible for internal communication about the project within the companies.

3.11 Project tasks, follow-up and actions

The Project Manager is responsible for ensuring that the project runs according to the project plan and taking measures in case of deviations. If action is required, the Project Manager must contact the Project Committee or Project Support.

3.12 Prepare status reports

The Project Manager prepares status reports to the Steering Group (Appendix 5) and Vinnova (via the stakeholder portal) at intervals according to the meeting, communication and publication plan. Status reports to Vinnova are made in consultation with the Project Support.

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3.13 Manage Changes

The project manager is responsible for ensuring that requests for changes are addressed in a timely manner within the Project Committee. Approved changes are documented via the minutes or in a changelog (Appendix 6). Vinnova and the Steering Group shall be notified if the project is delayed or risks being delayed, as well as if there is a risk that the project will not correspond to reasonable expectations. This is done by the Project Manager in consultation with the Project Committee and Project Support.

3.14 Reporting to Vinnova

The Project manager reports project costs in Vinnova's stakeholder portal in connection with status reporting to Vinnova according to the funding decision. Project costs must be reported according to Vinnova's guide to eligible costs. If necessary, the accounting form (Appendix 8) can be used for reporting the project partners' costs to the Project Manager. To facilitate cost calculation, there is a model for certain types of industrial trials.

The Project Manager includes the financial information in status reports to the Steering Group (Appendix 5). The Project Manager is also responsible for ensuring that industrial efforts are reported according to the agreed plan.

3.15 Reporting to the programme Metallic Materials

The Project Manager is responsible for ensuring that sub-reports, Phase reports and final reports are prepared according to plan and on the template in Appendix 7. The reports are numbered and published in the report series Jernkontorets Forskning. Normally, the detailed reporting is done only to the programme and not to Vinnova. It is important that all project participants who in some way contributed to the content of the report are listed as authors. The Project Committee must approve articles and conference contributions before publication in accordance with the consortium agreement.

Completion

3.16 The Project Committee approves reports

The Project Committee decides on approval of sub-reports. The project committee approves Phase reports and Final reports and passes them on to the steering group.

3.17 The Steering Committee approves reports

The steering group decides on approval of Phase reports and Final reports and the Project Support informs the Programme Office about the decision.

3.18 The programme evaluates the project

The programme sends out a survey to the project partners. In connection with programme-wide evaluation, further efforts may occur.

3.19 Archive and close project accounts

The programme office is responsible for closing the project in Jernkontoret project management system PIAplus.



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4 PROJECT DOCUMENTS

The following documents are used in the project work and should be stored in PIAplus

- Project plan

A detailed description of how the project is to be implemented in order to meet the project objectives. The plan must be in accordance with the approved project application and be prepared by the project manager in consultation with project support and the research committee.

- Consortium agreement

- Meeting minutes

All meetings of the Research Committee and the Steering Group shall be recorded in the minutes.

- Changelog

This is kept updated by the Project Manager

- Status reports

Prepared by the Project Manager before each Project Committee meeting and Steering Group meeting.

- Sub-reports, Phase reports and Final report

The final report is prepared by the Project Manager in consultation with Project Support and the Project Committee and is the final reporting of the project's results. Phase reports form the basis for a decision to proceed to the next project phase. Sub-reports can be used for detailed descriptions of different project parts.

Project documents in the appendices

Phase	Document	Responsible	Appendix
Start-up	Project plan	Project Manager	1
	Project Agreements Points	Project Manager (+Project Support)	2
Project work	Agenda for project committee meeting	Projects Committee chairman	3
	Agenda steering committee meeting	Steering Committee chairman	4
	Status report to steering group	Project Manager	5
	Changelog	Project Manager	6
Completion	Stage report and final report	Project Manager	7
Finances (Excel)	Form for reporting project costs	Project Manager / Project members	8

Writable templates are available in PIAplus under the Templates tab.



PIAplus project number		Project title and acronym
Vinnova's project number	er	Project Support
Date	Version	Prepared by:

1 Steering Group

2 Project duration

Project start: Project end:

3 Project organisation

- 3.1 Project manager
- 3.2 Project partners

4 Project Committee

- 4.1 Committee Chairman (Name, Company)
- 4.2 Regular committee members (name, company)
- 4.3 Co-opted committee members (name, company)
- **4.4 Project Support**



- 4 Background
 - 4.1 State of the art
 - 4.2 Current situation in measurable form (eg energy, productivity etc.)

5 Expected results

5.1 Project goals

5.2 Deliverables

Project phase / Work package	Deliverable	Date finished

5.3 Impact



6 Gantt chart

6.1 Time plan

	201	9			202	20			202	1			202	2		
Task	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Include any Phase divisions and decision points

6.2 Responsible

Task	Responsible	Participant	Roles

6.3 Purchasing plan



7 Budget

7.1 Budget project partners

	2019	2020	2021	2022	Total
	(kkr)	(kkr)	(kkr)	(kkr)	(kkr)
Project parner 1					
Project parner 2					
Total cost (kkr)					

7.2 Financing incl. industrial contribution

Financer:	Total	2019 (kkr)	2020 (kkr)	2021 (kkr)	2022 (kkr)	[%]
Vinnova		(1111)	(1111)	(1111)	(1111)	
Project partmer X (industrial contributon)						
Project partner Y (industrial contribution)						
Sum						100



8 Stakeholder management plan

Stakeholder	Needs, requirements, expectations, goals	Response / Management

9 Meeting, communication and publication plan

Type of information and channel	Time or frequency	Responsible

10 Plan for risk management

Scale 1 (= low) to 3 (= high): Probability (S): Influence (P): Risk value = $S \times P$

Risk	Consequence	Treatment	S	P	SxP	Responsible

Include critical activities and their consequences



11 Sustainability

Effect of the project	
Reference case	

	1. Raw materials	2. Production	3. Use	4. Recycling	5. Residuals
A. Use of resources					
B. Emission of greenhouse gases					
C. Other emissions					
D. Influence on the natural environment					
E. Working environment and health					
F. Human rights					
G. Equality and diversity					
H. Economic advantage for companies					
J. Economic advantage for society					

	Area (ex. A-I, E-4)	Describe how the project affects this aspect of sustainability
Aspects with +		
Aspects with -		



12 Approval

Project plan approved	
Project Manager	Chairman Project Committee
Name Date:	Name Date:
Project Support	Chairman Steering Group
Name Date:	Name Date:

CONSORTIUM AGREEMENT



The following points should be included in the consortium agreement for the project:

- Budget and commitments
- Project organization, especially the Project Committee and the Steering Group
- Confidentiality
- Management of Background Information
- Management of project results and rights to use them
- Publication
- Changes in the project consortium

A number of templates are available on the Metallic materials website, www.metalliskamaterial.se, ranging from simple agreements to agreements with processes to manage ownership of project results.

PROJECT COMMITTEE MEETINGS ITEMS FOR THE AGENDA



Start-up meeting

- 1. Opening of the meeting
- 2. Information on competition law compliance (Project Support)
- 3. Election of chairman and meeting secretary
- 4. Approval of the agenda
- 5. Presentation of the programme and project handbook (Project Support).
- 6. Presentation of the approved project application (Project manager)
- 7. Confirmation of the project committee members
- 8. Election of project committee chair
- 9. Proposal of Steering Group members
- 10. Formulation of the project plan. [the Project Manager should distribute a draft before the meeting]
- 11. Proposal for the consortium agreement [the Project Manager should distribute a draft before the meeting]
- 12. Planning of continued work
- 13. Other issues
- 14. Next meeting

Subsequent meetings

- 1. Opening of the meeting
- 2. Information on competition law compliance (Project Support)
- 3. Approval of the agenda
- 4. Minutes from the previous meeting
- 5. Reporting of results
- 6. Planning of continued work
- 7. Project's finances and time plan
- 8. Any changes to the project plan
- 9. Planning of upcoming reporting to the Steering Group
- 10. Other issues
- 11. Next meeting

STEERING GROUP MEETINGS ITEMS FOR THE AGENDA



Project start

- 1. Opening of the meeting
- 2. Information on competition law compliance (Project Support)
- 3. Election of Chairman
- 4. Approval of the agenda
- 5. Presentation of the programme and project handbook (Project Support).
- 6. Approval of the project plan
- 7. Other issues
- 8. Next meeting

Subsequent meetings

- 1. Opening of the meeting
- 2. Information on competition law compliance (Project Support)
- 3. Approval of the agenda
- 4. Technical and financial status report for the project
- 5. Approval of any major changes to the project plan
- 6. Approval of phase / final report (when relevant)
- 7. Other issues
- 8. Next meeting





Status report to the Steering Group

- Project title:
- Acronym:
- Project manager:
- Project committee chairman:
- Project start:
- Project end:
- Report date:





Bakgrund/mål

• Beskriv kortfattat, max 20 ord



Deliverable Due date Status



New results

and possibilities for implementation

• Brief results in one slide, a more detailed technical report can be provided separately

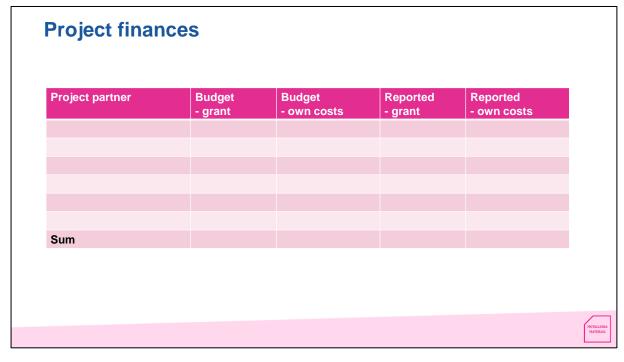


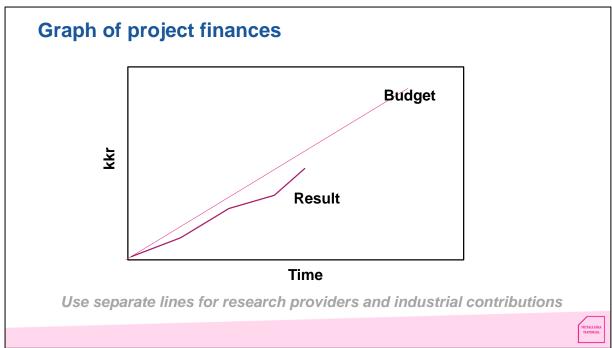
Deviations from the plan / problems

• Brief summary









CHANGELOG



PIAplus project number		Project title and acronym
Vinnova's project numbe	r	Project Support
Date	Version	Prepared by

Change date	Change (time, cost)	Decision (forum, date

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Jernkontorets forskning

Report B ###

[Rapportens titel]

[Report title] [In English (if Swedish is the main language) or vice versa]

[Authors]

[A final report must be clear and easy to read. The normal length is approx. 20 pages plus appendices, detailed information is preferably published in sub-reports]. [Report language - Swedish or English - is decided by the project committee]

Project number: ##### Published: 20##-##-## Limited distribution - Open after: 20##-##-##









Distribution

This report is open only to persons within the following companies who have participated in the project [enter project acronym here]

[list the companies here]







Summary

[The summary should be a maximum of half an A4 page and contain a description of the results achieved. The interpretation of these together with the conclusions must also be included. Avoid only describing activities performed.

The project results should be set in a broader context. Describe what benefit the project has brought to the companies and science.

From the summary, the reader should be able to understand what the project has achieved. Only the specialist reader should need to read the full report to see the contents].

Sammanfattning

[As above but in Swedish]

Key words:

[Key words are always in English]

1 Introduction

[Describe the purpose of the work in a clear way so that the reader understands the problem directly and is introduced to the report. Start from what was written in the application and the programme description.

- a) Describe the industrial and scientific issues.
 - What industrial need / problem do we want to address?
 - What happens if we do not address this?
 - What is the direct industrial benefit of a successful project?
 - What knowledge gap should the project fill?
 - What is the scientific news value?
- b) Describe the project's relation to the programme.

2 Goal

[The objectives of the project must be clearly stated. Start from what was written in the application and possibly also the programme description and specify:

- a) Expected Results
- What should have been achieved during the project e.g. new knowledge or significantly improved methods?
- b) Deliverables
- What should be delivered at the end of the project? e.g. doctoral thesis, new method, new model, new process solution, software.
- c) Impact
- Which industrial benefit can the project create?
- What environmental benefit can the project create?
- *d)* Contributions to the programme objectives
- Describe how the project contributes to meeting the programme's result aims and impact goals.]

3 Background

[Describe the necessary background to the issues within the project.

Technical and scientific projects should include a classic description of "State of the Art" that clarifies the technical and theoretical background; What have industry and research organisations done previously in the field?

- What is the status of industry R&D and technology in the area?
- What knowledge in the area already exists in industry and research organisations?
- What results have been published in the area?]

4 Method

[Describe the method used in the project.

Technical and scientific projects must contain a description of the experimental designs / methods to answer the research questions and the reasons why the experiments have been carried out in the way they have been done.

Projects that do not have a technical or scientific approach can, if it fits the project content better, change the title to "Implementation" and describe the activities that have been carried out within the project in order to achieve the goals, and why the activities have been implemented in the way they have been done.]

5 Results

[Report the results - and only the results - from relevant studies, model studies, measurements and monitoring. Avoid commenting on the results other than in cases where particular data must be given special attention.

In exceptional cases, when the nature of the research task does not allow any other approach, the results can be discussed in this chapter.]

For projects that do not have a technical or scientific approach, the title can be changed to "Outcome" and describe the outcome of activities that have been carried out, e.g. by listing and describing the deliverables from by the project.]

6 Discussion

[Discuss the results in chapter 5. What do they mean? How can they be interpreted? How are the results linked to the theoretical background? How are the results linked to the State of the Art description? Has anything irrelevant affected some results? What are the views of the authors on the achieved results? Here a certain level of speculation is allowed.

For **projects that do not have a technical or scientific approach**, the outcome of the project is discussed in a similar manner. What worked well and what less well?

7 Conclusions

- a) Relate to the problem formulation in the Introduction and draw overall conclusions from the results / outcome of the entire project.
- b) Discuss the achievements with regard to the aims. Has the project achieved what was expected?
- c) Assess the possibilities of achieving the ultimate goals and in what time perspective.
- d) If the project is part of a programme, relate to the programme's goals and visions.

8 Utilization of results and continued work

This section is included in a final report

- a) Describe how the results have been introduced in the companies' operations (processing, product development, marketing, etc.) or implemented by other stakeholders. What benefit has been achieved by the conclusion of the project?
- b) What further research or other efforts are needed to achieve full payback in terms of the impact goals?
- c) Present ideas on continued research in the field.

9 Comparison with the project plan

This section is included in a Phase report

- a) Insert the Gantt table from project plan, enter status with color codes (green-yellow-red) and comment
- b) Describe any corrective action within the next phase of the project to reach the goals

10 Durability

This section is included in a final report

Effect of the project	
Reference case	

The items below should be considered in relation to the reference case. Will the effects of the project mean that there will be an increase or decrease for any of the points? Enter the influence qualitatively (+/0/-). If knowledge is missing, leave the box empty. More guidance can be found in SIP-Metallic Materials - Template for qualitative sustainability analysis in research projects

	1. Raw materials	2. Production	3. Use	4. Recycling	5. Residuals
A. Use of resources					
B. Emission of greenhouse gases					
C. Other emissions					
D. Influence on the natural environment					
E. Working environment and health					
F. Human rights					
G. Equality and diversity					
H. Economic advantage for companies					
J. Economic advantage for society					

	Area (ex. A-I, E-4)	Describe how the project affects this aspect of sustainability
Aspects with +		
Aspects with -		

Appendix 7

REPORT

9 References

[External references, publications from the project should be given in Appendix 2].

APPENDICES

Appendix 1 Project Organisation and participants

a) Participating researchers and industry representatives

Name	Organisation

b) Description of the project organisation

Brief description in a few lines, including the total budget for the project and the grant

Appendix 2 Publications

a) Refereed publications (published or accepted for publication in a scientific journal)

Nr	Title	Authors	Journal
A1			
A1			
A3			

b) Manuscripts submitted for refereed publication

Nr	Title	Authors	Journal
B1			
B2			

c) Manuscripts in preparation for refereed publication

Nr	Title	Authors
C1		
C2		

d) Theses (pubished and in preparation)

Nr	Title	Author	Date
D1			
D2			

e) Internal reports

Nr	Title	Authors	Report number
E1			
E2			

f) Other dokumentation

Nr	Title	Authors	Description
F1			
F2			

Appendix 3 Other dissemination

a) Popular scientific articles

Nr	Title	Authors	Journal
G1			
G2			

b) Non-refereed international conference papers

Nr	Title	Författare	Conference
H1			
H2			

c) Non-refereed national conference publications

Nr	Title	Authors	Conference
J1			
J2			

d) Seminars etc.

Nr	Title	Authors	Date- place
K1			
K2			

Appendix 4 Description of the programme

The project [Acronym] is part of the strategic innovation programme

Metallic Materials

The strategic innovation programme **Metallic Materials** is a joint programme of Jernkontoret, Svenskt Aluminium och the Swedish Foundry Association which is partly financed by Vinnova and runs from 2013 to 2019.

The aim of the programme is to realise the strategic innovation agenda **National action for metallic materials** with a long-term vision that the Swedish metals industry should play a central role in the global drive towards a better future. This means that market offerings much be at the absolute technical, economic and environmental leading edge and be developed by driven and involved individuals. At the same time production methods should have as small an environmental footprint as possible.

The programme supports initiatives in seven areas for renewal, growth and increased competitiveness:

- 1. Develop market offerings!
- 2. Open up the value chain!
- 3. Accelerate materials development!
- 4. Increase flexibility!
- 5. Improve resource efficiency!
- 6. Reduce environmental consequences!
- 7. Boost industrial competence and appeal!

The activities within the programme encompass R&D projects selected after open calls as well and strategic projects and activities.

The programme office, with responsibility for leadership and administration of the programme, is Jernkontoret.

KOSTNADSREDOVISNING

METALLIC

COST SPECIFICATION

Oppgirtsialinate Name	Organisation	
Project title	Total budget for the project partner	PIAplus project number

Specification number:	1	2	3	4	5	9	7	8	Totalt
Report date Accounting period									
Personnel costs Equipment, property, buildnings Consultant costs, licences etc. Other direct costs including materials and travel Indirect costs									0 0 0 0
Total Running total Remaining	000	0 0 0	0 0 0	0 0	0 0 0	0 0 0	0 0 0	0 0 0	0

he above costs are confirmed by an authorised signatory

adure Conninied by an aduloused signatury Company ature Company lature Place and date	ture Company In a manifest by all authorised signatory Company Place and date
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Appendix 8

Changes introduced into the project handbook 2019

Clearer definition of roles Clarification of reporting to Vinnova and the Metallic Materials programme Consortium agreement moved earlier in the process

Appendix 1 Project plan

Simplification of financial tables Extension of the sustainability analysis from A-G to A-J

Appendix 2 Consortium agreement

Reference to templates on www.metalliskamaterial.se

Appendix 3 Agenda for project committee

Competition law compliance and consortium agreement included More logical order of points

Appendix 4 Agenda for steering group

Competition law compliance included More detailed points

Appendix 5 Status report to steering group

New ppt template Clearer reporting of grant use and own funding Shorter reporting of background and results

Appendix 6 Changes log

No alterations

Appendix 7 Report template

Modification of instructions to encompass non-technical projects Extension of sustainability analysis from A-G to A-J

(previous Appendix 8 Summary for approval of final report has been removed)

Appendix 8 Cost specification

The same Excel sheet now implemented for both research organisations and companies, replaces previous Appendices 9-10)

(previous Appendix 11 Project evaluation replaced by web-based questionnaire)

