





Erfahrungen im Projektmanagement (Folien in Englisch)

Regionaltreffen Süd der Max-Planck-Gesellschaft München, 17. April 2012

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Overview

- 1. The Max-Planck EU Regional Office Baden-Württemberg
- 2. Introducing the EU FP7 project "myCopter"
- 3. Managing the collaborative project "myCopter"





1. The Max-Planck EU Regional Office Baden-Württemberg

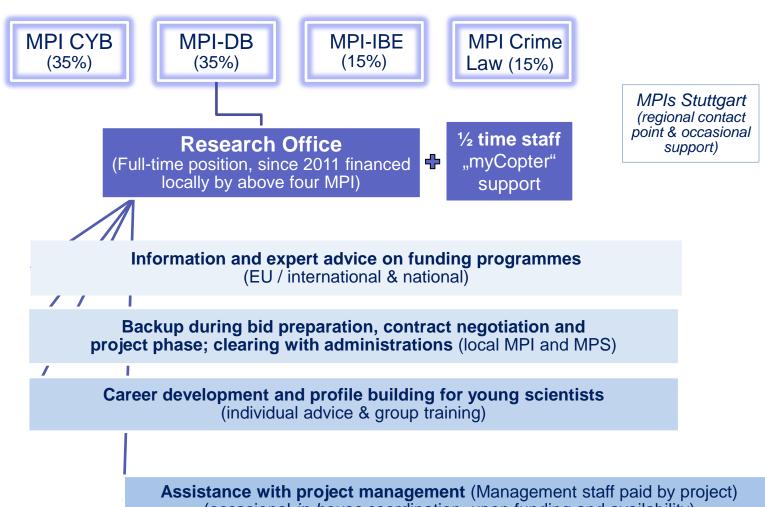






Max Planck research funding South Baden-Württemberg

- since 1.12.2007 hosted by MPI Campus Tübingen -



(occasional in-house coordination, upon funding and availability)





The mission statement

Furthering participation from Max Planck scientists in Third Party funded research and related activities:

- information and expert advice on EU and national funding opportunities, programmes and policies
- comprehensive assistance with bid preparations
- backup during contract negotiation and project management
- help with cost calculation
- information about trans-national researcher mobility as well as ERC starting and ERC advanced grants
- advice on strategy or profile building (individual or group)
- individual advice and group training for young scientists
- ... in-house project management support (trial phase)





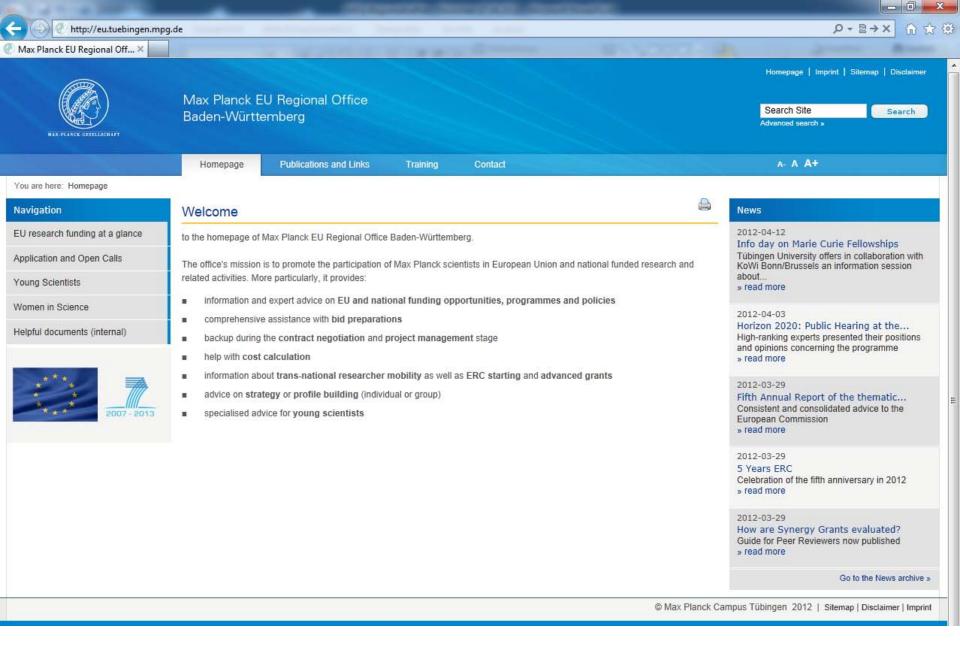
My motivation for doing "management support"

'Pros':

- "Göttinger Modell": project management as an opportunity to expand scope of work and to hire staff ("trial phase") ⇒ EU Office hired ½ time MGT support staff!
- Not first management experience: desire to be **more actively involved in science** (as opposed to exclusively administrative work agenda)
- Project management experience profitable for consulting work (all project phases)
 - better understanding of involved people/competences and work processes
 - more comprehensive grasping of legal and financial room for manoeuvre
- Personal interest in research subject both an opportunity and an advantage

'Cons':

- No familiarity with research subject or field a risk? (Hire a specialist?)
- Should a consultant be a manager? (compatibility issue, time issue)







2. Introducing the EU FP7 project "myCopter"







EU project "myCopter": 1. The human aircraft interface



Figure 1: Interaction of humans with Personal Air Vehicles should be as intuitive as possible, and could be similar to current cars (© Flight Stability and Control)





EU project "myCopter": 2. The automation and control challenge

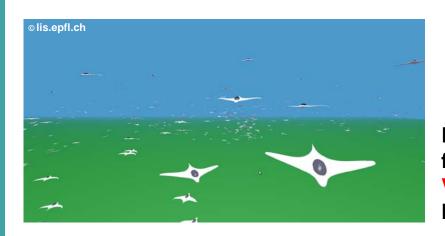


Figure 2: Automation technologies for flocking behaviour of Personal Air Vehicles will be essential for dealing with large amounts of traffic (© lis.epfl.ch)

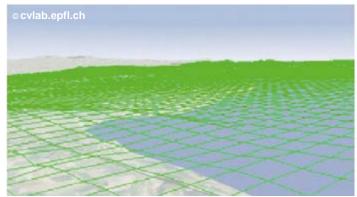


Figure 3: Automation technologies for terrain detection by computer vision algorithms (© cvlab.epfl.ch)





EU project "myCopter": 3. The socio-technological impact

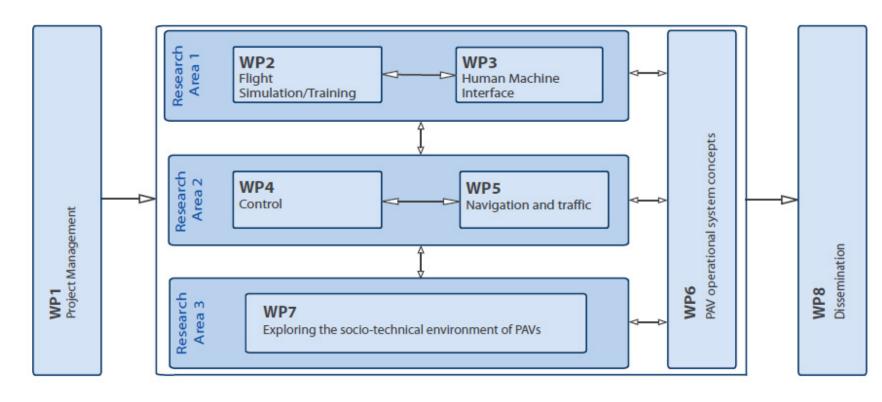


Figure 4: Personal Air Vehicles will have a large impact on society, raising questions about user expectations and interactions with new aerial transportation systems (© KIT)





EU project "myCopter": Project work structure



PERT chart: showing interaction between WPs.







EU project "myCopter": The consortium



Project funded by the European Union under the 7th Framework Programme



Max-Planck-Institut für biologische Kybernetik



http://www.kyb.mpg.de

Project co-ordination and management, development of novel human-machine interfaces for steering and navigation of PAVs.

The University of Liverpool



http://www.flightlab.liv.ac.uk

Modelling PAV concepts and development an efficient paradigm to train people for flying PAVs.

École Polytechnique Fédérale de Lausanne



http://www.epfl.ch

Development of control strategies for mid-air collision avoidance, formation flying, automation algorithms for determining a landing spot, and automatic take-off and landing.

Eidgenössische Technische Hochschule Zürich



Eidgenässische Technische Hachschule Zürici Swiss Federal Institute af Technology Zurich

http://www.asl.ethz.ch

Development of control strategies for automatic take-off, navigation and landing of PAVs.

Karlsruher Institut für Technologie



http://www.itas.fzk.de

Investigation of the socio-technological context, the infrastructural environment, the potential impact on society and social expectations towards PAVs via reflexive analysis.

Deutsches Zentrum für Luft- und Raumfahrt



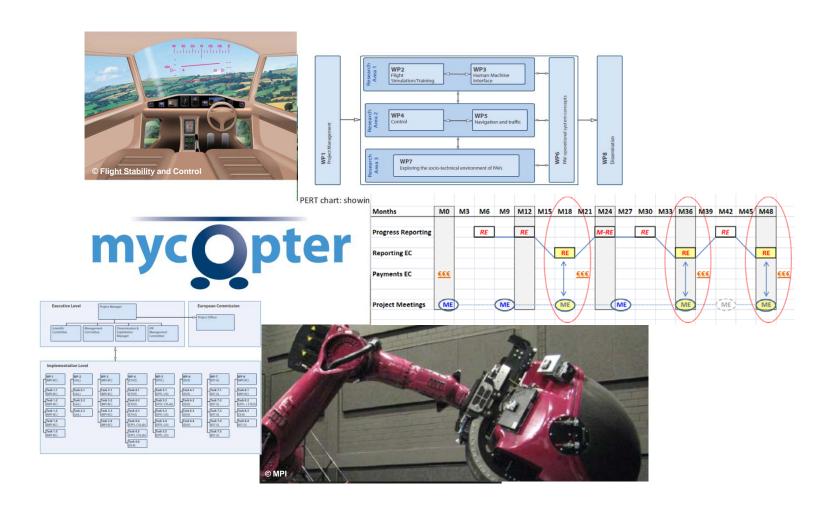
http://www.dlr.de/flugsystemtechnik

Evaluation of newly developed technologies using the Flying Helicopter Simulator, and support of the development of dynamic models and Highway-in-the-Sky displays.





3. Managing the collaborative project "myCopter"







EU project "myCopter": Contract negotiations

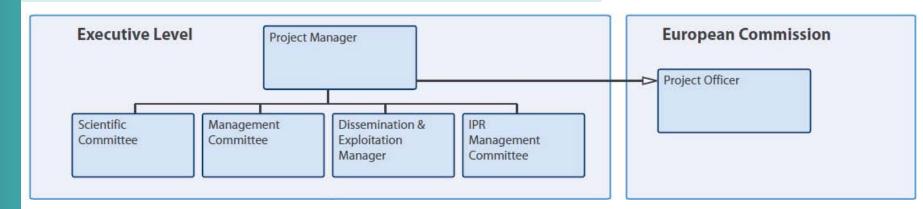
Duration: Mar - Jul 2010 (~4 months)

- Basis: Evaluation summary report, negotiation mandate, EU project officer
- NEF / Participant Portal: administrative/financial data, deliverables, roles
- Annex 1 Description of Work (NEF and Part B)
- Consortium agreement negotiation (DESCA based)
- Early and continuous involvement of MPI-Cyb admin (finances, personnel), advance payment
- Kick-off meeting in Jan 2011 in Tübingen





EU project "myCopter": Project management (I)



WP1 Objectives

To set up and apply the procedures necessary to

- coordinate and periodically monitor the progress of the project
- ensure the achievement of its scientific aims
- Overall implementation of the project's timescale and related project meetings, reporting, dissemination activities, project procedures and bodies, and communication at consortium level
- Overall monitoring of legal/contractual framework and financial administration (incl. distribution of the budget)





EU project "myCopter": Project management (II)

▶ 1.1: Overall project coordination (M1-48)

- -Kick-off and project meetings, final international workshop and related dissemination activities of WP8 (M1, 9, 18, 27, 36, 42, 48)
- -Overall coordination of project procedures and bodies: Scientific committee, Management committee/IPR, Dissemination manager, Work package Leaders (M1-48)

▶ 1.2: Project communication (M1-3; M1-48)

- -Setting up of a project website and mailing lists, organisation of video conferences between partners (M1-3)
- -Communication of the Project coordinator with the appropriate offices of the EC (M1-48)





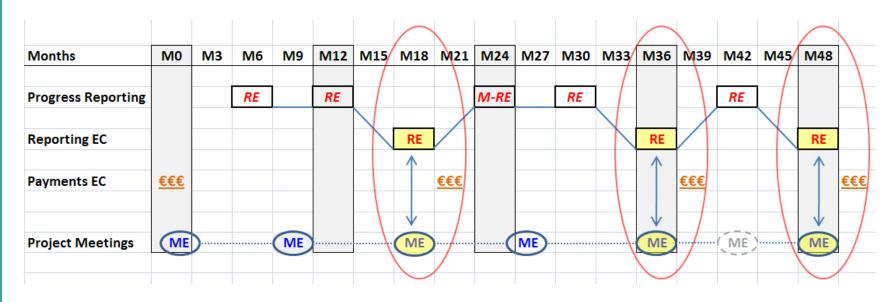
EU project "myCopter": Project management (III)

- ▶ 1.3: Preparation of the Mid-Term Assessment Review (M22–24)
 - -Conducting a Mid-Term Assessment in order to monitor the progress of the project and the realisation of the objectives
- ▶ 1.4: Project reporting (M6, 12, 18, 24, 30, 36, 42, 48)
 - -Assisting with preparation of periodic reports (scientific, financial)
 - -Assisting with preparation of final reports and White paper, "Into the Box, solutions for the future of air transport" (M48)
- 1.5: Financial and legal management (M1-48)
 - -General financial administration (budget distribution, cost statements and continuous budget control, audits)
 - -Legal management (GA, Consortium agreement, IPR issues)





EU project "myCopter": Project management (IV)

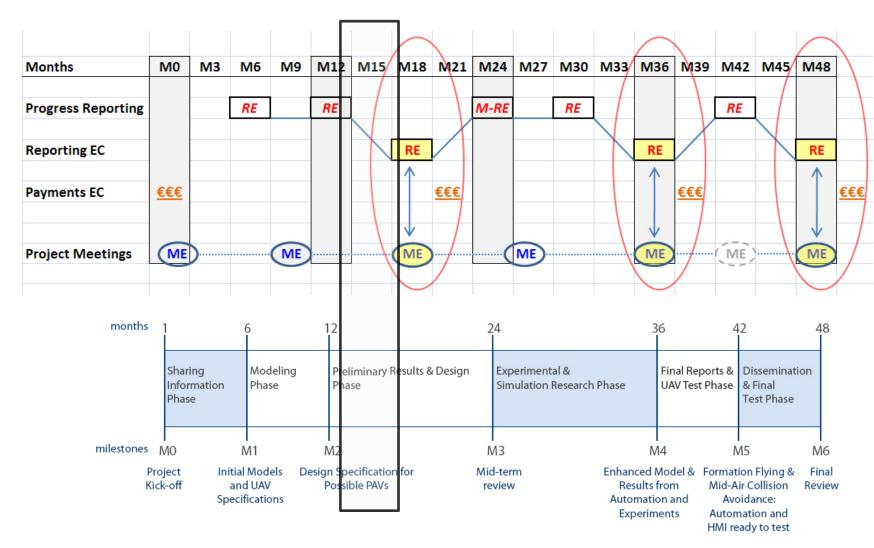


Del. No.	Deliverable name	WP No.	Nat. ²	Diss. level ³	Estimated PM	Delivery date ⁴
D1.1	Project meetings	1	0	RE	8	M1, 9, 18, 27, 36, 42, 48
D1.2	Project webpage	1	R	PU	4	M3
D1.3	Mid-Term Assessment Review	1	R	RE	2	M24
D1.4	Biannual project management and financial reports	1	R	RE	10	M6, 12, <u>18</u> , 24, 30, <u>36</u> , 42, <u>48</u>
D1.5	Project Handbook / Guidelines on best practice	1	R	RE	1	M3
D1.6	Final international workshop	1	0	PU	4	M48





EU project "myCopter": Project management (V)







EU project "myCopter": Project management (VI)

CONSORTIUM level: MGT (WP1) tasks for months 1-12

- Distribution of EC advance payment to partners (M1)
- Amendment to GA Annex 1, if applicable (M1-3)
- Setting up project website and mailing lists (M1-3)
- Providing for internal periodic reporting templates (handbook, M3)
- Implementing internal peer reviewing / quality control (M6)
- Internal project reporting (M6, M12)
- Co-organising 1st periodic project meeting (M7-9)

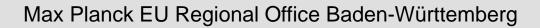




EU project "myCopter": Project management (VII)

1.3.6 Summary of staff effort

Participant n short names	10./	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	Total person months
1 - MPI-BC										
2 - UoL										
3 - EPFL										
4 - ETHZ						Not pu	blic			
5 - KIT										
6 - DLR										
To	otal									







EU project "myCopter": Finances (I)

Project Nun	Project Number ¹ 266470 Project Acronym ² myCopter											
	One Form per Project											
Participant				Esti	mated eligible co	sts (whole dura	tion of the pro	ject)		Requested		
number in this project ¹¹	Participant short name	Fund. % ¹²	Ind. costs ¹³	RTD / Innovation (A)	Demonstration (B)	Management (C)	Other (D)	Total A+B+C+D	Total receipts	EU contribution		
1	MPI-BC	75.0										
2	UoL	75.0										
3	EPFL	75.0										
4	ETH Zurich	75.0				Not pu	ıblic					
5	KIT	75.0										
6	DLR	75.0										
Total												

Note that the budget mentioned in this table is the total budget requested by the Beneficiary and associated Third Parties.





EU project "myCopter": Finances (II)

Table 2.1: myCopter major costs other than personnel (in Euro)

Part. No.	Participant Short Name	Travel	Consumables	Equipment	Dissemination	Total				
1										
2										
3										
4		Not public								
5										
6										

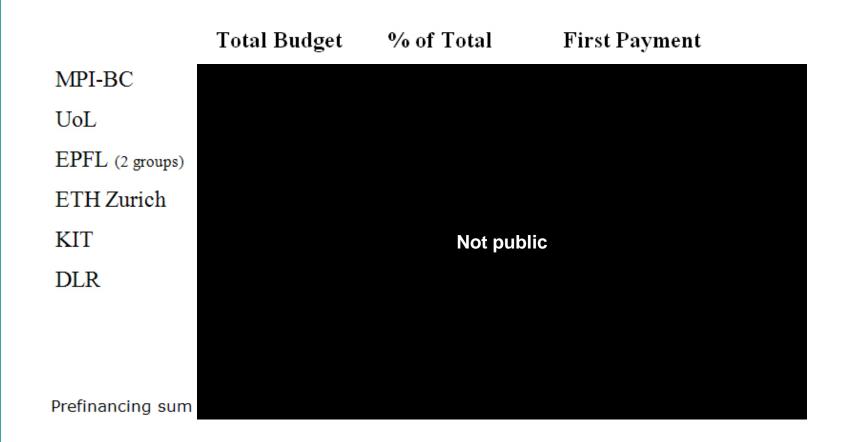
Principle of cost flexibility (regulated by <u>objectives of myCopter</u> <u>scientific work programme</u> and <u>cost eligibility criteria</u>)
 ("Elasticity" issue - never ending discussion with scientists, administrations, EU)





EU project "myCopter": Finances (III)

Distribution pre-financing







EU project "myCopter": Internal Reporting (I)

WP 1 - Completed Deliverables (months 1 - 6, WP 1 - 8), via Particip. Portal

Del. no.	Deliverable name	WP	Lead	Delivery date from Annex I	Planned date	Delivered Yes/No	Actual / Forecast delivery date	Comments	
D1.1	Project Meetings	1	MPI-BC	M1	2011 Jan	Yes	20-21 Jan; 19 May 2011		
D1.2	Project webpage	1	MPI-BC	M3	2011 Mar	Yes	31 Mar 2011		
D1.5	Project Handbook (Compilation of templates)	1	MPI-BC	М3	2011 Mar	Yes	31 Aug 2011		
D2.1	Initial vehicle models	2	UoL	M6	2011 Jun	Yes	19 Aug 2011	Not public	
D4.1, D4.2	Helicopter platform requirements definition and concept selection	4	ETHZ	М6	2011 Jun	Yes	20 Jul 2011		
D8.1	Promotion of project on internet and in print	8	MPI-BC	M6, M45	2011 Jun	Yes	30 Jun 2011		





EU project "myCopter": Internal Reporting (II)

WP 1 - Completed Milestones (months 1 - 6, WP 1 - 8)

Miles tone	Milestone name	WP	Delivery date from Annex I	Planned date	Achieved Yes/No	Actual / Forecast date	Comments	
МО	Project Kick-off	1-7	M1	2011 Jan	Yes	20-21 Jan 2011	Not make	
M1	Initial Models and UAV specifications	2, 4	M6	2011 Jun	WP2: Yes WP4: Yes	20 Jul 2011 19 Aug 2011	Not public	





EU project "myCopter": Internal Reporting (III)

WP 1 - Overview Person months (months 1 - 6, all partners)

PROGRESS OF WORK - Planned (48 months) versus actual man months (months 1 - 6)

	MPI-BC	U	oL	EPFL	ETHZ	KIT	DLR
Activity type		_			al Planned Actual	1 1	
RTD/Innovation							
WP2: Flight Simulation/Training							
WP3: Human Machine Interface for controlling a PAV							
WP4: Control and navigation of a single PAV							
WP5: Navigation in air and interaction with other traf							
WP6: PAV operational system concepts							
WP7: Exploring the socio-techn. environment of PAV							
Subtotal							
Management							
WP1: Project Management				Not	public		
Subtotal				Not	public		
Others							
WP8: Dissemination activities							
Subtotal							
Man months total (all beneficiaries)							
Percentage							
Total (all partners) Planned Actual PM Actual %							
Not public							





EU project "myCopter": Internal Reporting (IV)

WP 1 - Overview Budget spending (months 1 - 6, all partners)

2. Progress budget spending (M1-M6)										
Beneficiary n°	Organisation Short Name	Budget: (A)+(B)+(C)+(D) - Planned total costs 4 years -	Budget - spent after 6 months -	Budget - spent after 6 months - (percentage)						
1	MPI-BC									
2	UoL									
3	EPFL		Mat well-							
4	ETHZ		Not public							
5	KIT									
6	DLR									
то	TAL									





EU project "myCopter": Internal Reporting (V)

WP 1 - Management during next 6-12 months

- Continuous financial and legal management, communication support
- Preparation of the 2nd six-months **internal project reporting** (M12) Templates for (a) scientific reporting, (b) financial reporting, and (c) deliverable reporting. **Deadline: 16 Jan 2012**
- Setting up of a periodic reporting template for 1st official EU reporting based on electronic Participant portal format (M16-18)
 -> available then on myCopter Website/Project Handbook (compilation of templates)
- Continuous submission of **Deliverable reporting** on EC electronic Participant Portal (M12-18)
- Co-organising 2nd periodic meeting





EU project "myCopter": Conclusions

- Project manager as interface and problem solver between scientists (local + consortium), administrators (local + headquarters, consortium), lawyers, ... and the funding agency
- **Early involvement** of local administrators (since application phase)
- The project and budget "flexibility issue" between scientists and administrators
- Reporting rigour (6-months intervals) an advantage for the science
- Project meeting finances a challenge
- Official EU reporting and audit certification not (yet) an issue at this project stage





Scientific internal reporting template (I)



Enabling Technologies for Personal Aerial Transportation Systems

2nd INTERNAL REPORT

- SCIENTIFIC ACTIVITIES -

This reporting covers the 6-months-period of work from 1 Jul until 31 Dec 2011, so please report for expenses during these 6 months only.

Submission deadline: 16 Jan 2012

‡ +										
	Name of Partner									
	institution									
	Partner number	n/a								
	Personnel hired on the project (please list below)									
	Full Name		Gender	Position	E-Mail					







Scientific internal reporting template (II)

A. Project Objectives, Work Progress and Achievements

Your individual report will be, together with the reports of the other partners, the basis for the 6-months reports of the Coordinator, which will eventually be used to draft the official 18-months scientific report for the EC. Please write in a summarizing way in order to ease the process of aggregating the information.

Please provide a brief overview (max. 1 page) of

- The project objectives for this period (as found in 1.3.4 of Annex I)
- A summary of progress towards the objectives, including details for the tasks laid out in Annex I (highlight clearly significant results)
- If applicable, please explain the reasons for deviations from Annex I, including for failing to achieve objectives or to keep the schedule, and the impact on available resources and planning
- If applicable, propose corrective actions
- Specify any other problems, changes or suggestions regarding this period







Scientific internal reporting template (III)

D. Dissemination

Publications - please list any scientific and non scientific publication which has arisen as a result of a Work package (complete reference)

Publication reference	WP number	WP task

 Presentation of the <u>mvCopter</u> project in scientific and other conferences or meetings (international or local), invitation as speaker or lecturer, awards, etc.

Title of conference, award	Date	City and Country	Type of presentation (talk or poster)	Title of the presentation

Interviews and other media coverage (<u>if not yet reported to Frank Nieuwenhuizen</u>)

Type (Interview, press	Date	Publication reference (incl. name of press or	Related to
release etc.)	Date	audiovisual media, web link etc.)	WP & task

NB: Dissemination activities also available as type-in tool in project section of Participant Portal





Scientific internal reporting template (IV)

E. Update on Person months

Please give an **update** of the number of person-months your staff has been working on the <u>myCopter</u> project between 1 Jul and 31 Dec 2011 (only staff being paid out of the project)

As an example, if you are paying one post doc out of the myCotper grant and he/she has started to work on the project on 1 Jul 2011, working full time, 50% on WP 2 and 50% on WP 4, you will be reporting 3 person-months for WP2 and 3 person-months for WP4.

Work package 1 (lead: MPI-BC)

Work package number	1	Start date or starting event:			M1		
Work package title	Management						
Activity Type ¹	MGT						
Participant number	1	2	3	4	5	6	
Participant short name	MPI-BC	UQL.	EPFL	ETHZ	KIT	DLR	
Planned PM per participant	24	1	1	1	1	1	
Actual PM (1 Jul - 31 Dec 2011)				8			

Work package 2 (lead: UoL)

Work package number	2	Start date or starting event:		M1			
Work package title	Flight Simulation/Training						
Activity Type	RTD						
Participant number	1	2	3	4	5	6	
Participant short name	MPI-BC	Ual	EPFL	ETHZ	KIT	DLR	
Planned PM per participant	4	30	2	2	0	4	
Actual PM (1 Jul - 31 Dec 2011)	8	ŝ.	×	. 8			





Finances & Management internal reporting template (I)

2nd INTERNAL REPORT | - Finances & Management -

This reporting covers the 6-months-period of work from 1 Jul until 31 Dec 2011, so please report for expenses during these 6 months only.

Submission deadline: 16 Jan 2012

A. Explanation of the use of resources

Please provide an explanation of personnel costs and any other major costs, such as the purchase of important equipment, travel costs, large consumable items etc. Specify to which work packages these costs are related.

There is no standard definition of "major cost items". Beneficiaries may specify these, according to the relative importance of the item compared to the total budget of the beneficiary, or as regards the individual value of the item.

The major cost items should be listed in the following table (please delete below examples in red):





Finances & Management internal reporting template (II)

Name of Partner institution: <insert here>

FOR THE PERIOD						
Work Package	Item description	Amount 75,000.00 €	Explanations (if applicable, please specify the nature of the cost item and the link to the required work)			
	Personnel costs		Example: Salaries of 1 postdoctoral researcher and lab technician for 6 months each (please delete)			
	Subcontracting					
	Major cost item 1: Example: Consumables	10,260.00€	Example: FLIGHTLAB licences to tune the simulators to the specifics of the envisioned PAV (please delete)			
	Major cost item 2: Example: Travel costs	2,500.00€	Example: Attendance of the myCopter project meeting in Liverpool, 18-19 Oct 2011 (please delete)			
	Major cost item 3:	95				
	Remaining direct costs					
TOTAL DIRECT COSTS AS CLAIMED ON FORM C						
	INDIRECT COSTS					
RE	QUESTED EC CONTRIBUTION					





Finances & Management internal reporting template (III)

B. <u>Audit Certificates</u> (not applicable in 2nd internal reporting period)

List of Certificates which are due for this period, in accordance with Article II.4.4 of the Grant Agreement

Name of Partner institution	short name of Partner institution	Certificate on the financial statements provided? yes / no	Any useful comment, in particular if a certificate is not provided (e.g. "expenditure threshold not reached")
n/a	n/a	n/a	n/a

If applicable, a copy of each duly signed certificate on the financial statements (Form C) should be included in this section, according to the table above (signed originals to be sent in parallel by post).

C. Financial Statement (Form C)

Please submit a separate financial statement based on the information given in Form C - Annex VI. Use the Excel file which is provided to each partner institution in the reporting package.

You should not use the EC's electronic Participant portal as this reporting is internal only.

Signatures are not required for internal reporting.







Deliverable template (I)

Deliverable <<u>Dx.x</u>> <Deliverable title>

Contractual delivery date: <Month/Year>

Actual delivery date: <Month/Year>

Partner responsible for the Deliverable: <name>

Author(s): <Name(s)>

Dissemination level ¹					
PU	Public				
PP	Restricted to other programme participants (including the Commission Services)				
RE	Restricted to a group specified by the consortium (including the Commission				
	Services)				
CO	Confidential, only for members of the consortium (including the Commission				
	Services)				







Deliverable template (II)

Revision Table

Version	Date	Modified Page/Section	Author	Comments
1.0				

Executive Summary

(10-15 lines)

Detailed Description (incl. Table of Contents, if applicable)

Please provide a concise overview of

- The work package's objectives for this period
- A summary of progress towards the objectives and details of this deliverable
- If applicable, please explain the reasons for deviations from Annex I, including for failing to achieve objectives or to keep the schedule, and the impact on available resources and planning
- If applicable, propose corrective actions
- Specify any other problems, changes or suggestions regarding this period



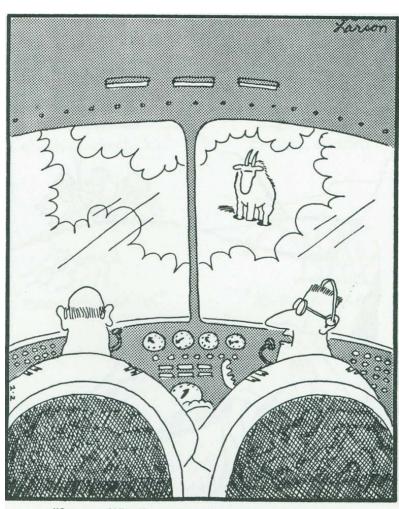


Thank you for your attention!



Patrice Wegener
Max Planck EU Regional Office Baden-Württemberg
c/o MPI Biological Cybernetics
Spemannstr. 41
72076 Tübingen

http://eu.tuebingen.mpg.de



"Say . . . What's a mountain goat doing way up here in a cloud bank?"