



AGENDA OF THE MEETING 05

Project: Cubesat constellation

<u>Participants:</u>	Luis Manuel Pérez (LMP)	Projects Department
	Joan Cebrian Galan (JC)	G4/EA-T2016
	Pol Fontanes Molina (PF)	G4/EA-T2016
	Lluís Foreman Campins (LF)	G4/EA-T2016
	Roger Fraixedas Lucea (RF)	G4/EA-T2016
	Oscar Fuentes Muñoz (OF)	G4/EA-T2016
	Sílvia González García (SG)	G4/EA-T2016
	Fernando Herrán Halbelda (FH)	G4/EA-T2016
	Boyan Kaloyanov Naydenov (BK)	G4/EA-T2016
	Victor Martinez Viol (VM)	G4/EA-T2016
	David Morata Carranza (DM)	G4/EA-T2016
	Laura Pla Olea (LP)	G4/EA-T2016
	Marina Pons Daza (MP)	G4/EA-T2016
	Josep Puig Ruiz (JP)	G4/EA-T2016
	Josep Maria Serra Moncunill (JMS)	G4/EA-T2016
	Sergi Tarroc Gil (ST)	G4/EA-T2016
	Xavier Tió Malo (XT)	G4/EA-T2016
	Eva Maria Urbano González (EMU)	G4/EA-T2016

Date and time: 3rd oct 2016, from 15:30 to 17:30

Place: Room SJ Intexter

AGENDA

1. Minutes of the last meeting aproval (5')
2. Agendas, minutes and documentation standards (10')
3. New organization responsables (5')
4. Bibliography protocol (5')
5. Individual performance verification procedure (10')
6. Project Charter Draft (15')
7. Teams formation (45')
8. Agenda of the next meeting (5')

Total time: 100'



ITEMS ON THE AGENDA

1. Minutes of the last meeting approval

Please find attached the minutes of the 29-09-2016:

"G4-Minutes-2016-09-29.pdf"

The following users have not seen the agenda:

The following users have not seen the minutes:

2. Agendas, minutes and documentation standards

The procedure for the meetings preparation and minutes review is going to be defined.
Here you can check the proposal to be discussed:

- How to guarantee that everyone looked the Agenda
- How to guarantee that the minutes of the last session is read
- How to name the documents

3. New organization responsables

a) LaTeX and Github responsible

His/her duties will be:

- Defining a template document
- Ensure that Git works for everyone.
- Solve technical issues with LaTeX and Github

Assigned responsible: Boyan Naydenov

b) Meetings moderator

His/her duties will be:

- Mantain order during the meetings
 - Ensure that the debate is strictly held in the topics
 - Stablish the duration of the different topics
- (MUST BE SUBMITTED IN THE AGENDA BEFORE THE MEETING)

Assigned responsible: Xavier Tió

c) BSCW and Slack responsible

His/her duties will be:

- Write notes in the BSCW platform
- Review of the users who have not seen minutes or agenda

Assigned responsible: Sílvia González

4. Bibliography protocol

Proposal of the Mendeley platform to automatically store bibliographic references. A guide will be done by BN regarding use and LaTeX compatibility.

5. Individual performance verification procedure

BN will present his proposal to be approved

6. Project Charter Draft

Section	Who	Indications
1. Aim	Boyan Joan	
2. Scope	Boyan Joan	Revision of the document delivered in the theory session
3. Justification	Volunteer	
4. Requirements	Boyan Joan	Usar apuntes de la sesión de lab
5. Organization of the group		
5.1. Organization Structure	Marina	
5.1. Roles and responsibilities	Marina	Mirar Agenda de dilluns (apartat 3) com a preliminar + Coordi + Secre
6. Planning of the project		
6.1. Task identification from WBS	Everyone	SEE MODEL 1 BELOW
6.2. Brief task description	Everyone	SEE MODEL 1 BELOW
6.3. Interdependency relationship among tasks	Everyone	SEE MODEL 2 BELOW Compulsory final ID definition
6.4. Human resources and level of effort	Everyone	SEE MODEL 2 BELOW
7. Budget		
7.1. Engineering hours budget	Everyone	SEE MODEL 3 BELOW
7.2. Preliminar total costs budget	Everyone	SEE MODEL 4 BELOW
GENERAL INDICATIONS	Everyone	- Quitar flores - Ajustarse a la extensión recomendada vista en teoría

Secció de Terrassa

Model 1 - Work package example Table for 6.1 + 6.2

ID	Work package	Brief Tasks Description List
1.1.	Meetings Documents	- Writing agendas of the meetings: The team's secretary will take note of the debate and conclusions of the meeting. - Writing minutes of the meetings: ...
1.2.	Task tracking and scheduling	-

Model 2 - Interdependency and human resources example Table for 6.3 and 6.4

ID	Work package	Time (h)	Prelations
1.1.	Meetings Documents	408	BB – 1.2
1.2.	Task tracking and scheduling	50	BF – 3.1 BF – 2.1.2

BF - Begin when the task ____ finishes

BB – The task begins at the same time that ____

FF – Finalization at the same time of the task and task ____

Model 3 – Engineering hours budget

SATELLITE DESIGN		
	Hours	Labour Cost
Spacecraft subsystems		
Electrical power system		
Primary Resources	17	340 €
Secondary Resources	25	500 €
Distribution & Control	4	80 €
Thermal Management		
Requirements	18	360 €
ACTS	18	360 €
PCTS	17	340 €
TOTAL	449	23,380 €
TOTAL ESTIMATED	449	23,380 €



Secció de Terrassa

Model 4 – Preliminar total costs budget

IT'S THE SAME TABLE, ADDING 2 COLUMNS

Total Estimated means the figure “arrodonida”

SATELLITE DESIGN				
	Product Cost	Hours	Labour Cost	
Spacecraft subsystems				
Electrical power system				
Primary Resources	17,000 €	17	340 €	
Secondary Resources	3,000 €	25	500 €	
Distribution & Control	2,000 €	4	80 €	
Thermal Management				
Requirements	-	18	360 €	
ACTS	-	18	360 €	
PCTS	-	17	340 €	
TOTAL		485	9700 €	TOTAL
TOTAL ESTIMATED	22000€	500	10000 €	32000€

7. Teams formation

8. Agenda of the next meeting

Answer the next question:

- Which topics were mentioned during the meeting that were not in the Agenda?



Tasks

- a) Definir los procedimientos del punto 2
 - a. How to guarantee that everyone looked the Agenda (Sílvia)
 - b. How to guarantee that the minutes of the last session is read (Sílvia)
 - c. How to name the documents (Oscar)
- b) Escribir un documento explicando como usar Mendeley (Boyan)
 - a. Cómo añadir una referencia al grupo
 - b. Cómo escribir en formato LaTeX las referencias
 - c. Definir dónde del trabajo van referencias
- c) Propuesta del punto 5 (Boyan)
- d) Proponer por slack quien hace la justificación



ATTACHED DOCUMENT OF THE AGENDA - MEETING 05

PRECEDURE OF PONT 2 OF THE AGENDA

As it has been established, all the documents, agendas and minutes will be upload on the web BSCW and the link will be shared on Slack in order to inform the rest of the members of its existence.

In particular, both the agendas and minutes are important documents for a correct project development so all the members are supposed to revise them.

Due to this importance, there is a need to control who fulfils this task. The next methods have been suggested:

- a. In order to guarantee all the members looked both the Agenda and the minutes of the last meeting, the list of people who access the document in BSCW will be monitored 10 minutes before every meeting.
- b. The unfulfillment of the task will be annotated on the minutes of the next meeting



MINUTES OF THE MEETING 06

Project: Cubesat constellation

<u>Participants:</u>	Luis Manuel Pérez (LMP)	Projects Department
	Joan Cebrian Galan (JC)	G4/EA-T2016
	Pol Fontanes Molina (PF)	G4/EA-T2016
	Lluís Foreman Campins (LF)	G4/EA-T2016
	Roger Fraixedas Lucea (RF)	G4/EA-T2016
	Oscar Fuentes Muñoz (OF)	G4/EA-T2016
	Sílvia González García (SG)	G4/EA-T2016
	Fernando Herrán Halbelda (FH)	G4/EA-T2016
	Boyan Kaloyanov Naydenov (BK)	G4/EA-T2016
	Victor Martinez Viol (VM)	G4/EA-T2016
	David Morata Carranza (DM)	G4/EA-T2016
	Laura Pla Olea (LP)	G4/EA-T2016
	Marina Pons Daza (MP)	G4/EA-T2016
	Josep Puig Ruiz (JP)	G4/EA-T2016
	Josep Maria Serra Moncunill (JMS)	G4/EA-T2016
	Sergi Tarroc Gil (ST)	G4/EA-T2016
	Xavier Tió Malo (XT)	G4/EA-T2016
	Eva Maria Urbano González (EMU)	G4/EA-T2016

Date and time: 6th of October 2016, from 10:00 to 12:00

Place: SJ INTEXTER

AGENDA

1. Minutes of the last meeting approval
2. Change of secretary
3. Project Charter delivery
4. Follow-up of the project
5. Oral presentations schedule
6. New tasks assignment
7. Next meeting

ITEMS ON THE AGENDA

1. Minutes of the last meeting approval

The last minute has to be approved



Secció de Terrassa

2. Change of secretary

The client must be informed about the decision of the team referring the new secretary

3. Project Charter delivery

The project charter has to be delivered to the client

4. Follow-up of the project

The team and the costumer have to be informed of the project developments

5. Oral presentations schedule

The team has to decide the schedule of the oral presentations, at least the next meeting one

6. New tasks assignment

The weekly tasks have to be assigned to the members of the team

7. Next meeting

The place and time of the next meeting has to be decided



AGENDA OF THE MEETING 04

Project: Cubesat constellation

<u>Participants:</u>	Luis Manuel Pérez (LMP)	Projects Department
	Joan Cebrian Galan (JC)	G4/EA-T2016
	Pol Fontanes Molina (PF)	G4/EA-T2016
	Lluís Foreman Campins (LF)	G4/EA-T2016
	Roger Fraixedas Lucea (RF)	G4/EA-T2016
	Oscar Fuentes Muñoz (OF)	G4/EA-T2016
	Sílvia González García (SG)	G4/EA-T2016
	Fernando Herrán Halbelda (FH)	G4/EA-T2016
	Boyan Kaloyanov Naydenov (BK)	G4/EA-T2016
	Victor Martinez Viol (VM)	G4/EA-T2016
	David Morata Carranza (DM)	G4/EA-T2016
	Laura Pla Olea (LP)	G4/EA-T2016
	Marina Pons Daza (MP)	G4/EA-T2016
	Josep Puig Ruiz (JP)	G4/EA-T2016
	Josep Maria Serra Moncunill (JMS)	G4/EA-T2016
	Sergi Tarroc Gil (ST)	G4/EA-T2016
	Xavier Tió Malo (XT)	G4/EA-T2016
	Eva Maria Urbano González (EMU)	G4/EA-T2016

Date and time: 13th of October 2016, from 10:00 to 12:00

Place: SJ INTEXTER

AGENDA

1. Minutes of the last meeting approval
2. Oral presentations
3. Follow-up of the project
4. Next meeting

ITEMS ON THE AGENDA

1. Minutes of the last meeting approval

The last minute has to be approved

2. Oral presentations

OF and XT have to perform the oral presentation they agreed on doing last meeting.



Secció de Terrassa

3. Follow-up of the project

The team and customer have to be informed of the project developments

4. Next meeting

The place and time of the next meeting has to be decided



AGENDA OF THE MEETING 05

Project: Cubesat constellation

<u>Participants:</u>	Luis Manuel Pérez (LMP)	Projects Department
	Joan Cebrian Galan (JC)	G4/EA-T2016
	Pol Fontanes Molina (PF)	G4/EA-T2016
	Lluís Foreman Campins (LF)	G4/EA-T2016
	Roger Fraixedas Lucea (RF)	G4/EA-T2016
	Oscar Fuentes Muñoz (OF)	G4/EA-T2016
	Sílvia González García (SG)	G4/EA-T2016
	Fernando Herrán Halbelda (FH)	G4/EA-T2016
	Boyan Kaloyanov Naydenov (BK)	G4/EA-T2016
	Victor Martinez Viol (VM)	G4/EA-T2016
	David Morata Carranza (DM)	G4/EA-T2016
	Laura Pla Olea (LP)	G4/EA-T2016
	Marina Pons Daza (MP)	G4/EA-T2016
	Josep Puig Ruiz (JP)	G4/EA-T2016
	Josep Maria Serra Moncunill (JMS)	G4/EA-T2016
	Sergi Tarroc Gil (ST)	G4/EA-T2016
	Xavier Tió Malo (XT)	G4/EA-T2016
	Eva Maria Urbano González (EMU)	G4/EA-T2016

Date and time: 20th of October 2016, from 10:00 to 12:00

Place: SJ INTEXTER

AGENDA

1. Minutes of the last meeting approval
2. Oral presentations
3. Follow-up of the project
4. Next meeting

ITEMS ON THE AGENDA

1. Minutes of the last meeting approval

The last minute has to be approved

2. Oral presentations

BK and PF have to perform the oral presentation they agreed on doing last meeting.



Secció de Terrassa

3. Follow-up of the project

The team and customer have to be informed of the project developments

4. Next meeting

The place and time of the next meeting has to be decided



AGENDA OF THE MEETING 06

Project: Cubesat constellation

<u>Participants:</u>	Luis Manuel Pérez (LMP)	Projects Department
	Joan Cebrian Galan (JC)	G4/EA-T2016
	Pol Fontanes Molina (PF)	G4/EA-T2016
	Lluís Foreman Campins (LF)	G4/EA-T2016
	Roger Fraixedas Lucea (RF)	G4/EA-T2016
	Oscar Fuentes Muñoz (OF)	G4/EA-T2016
	Sílvia González García (SG)	G4/EA-T2016
	Fernando Herrán Halbelda (FH)	G4/EA-T2016
	Boyan Kaloyanov Naydenov (BK)	G4/EA-T2016
	Victor Martinez Viol (VM)	G4/EA-T2016
	David Morata Carranza (DM)	G4/EA-T2016
	Laura Pla Olea (LP)	G4/EA-T2016
	Marina Pons Daza (MP)	G4/EA-T2016
	Josep Puig Ruiz (JP)	G4/EA-T2016
	Josep Maria Serra Moncunill (JMS)	G4/EA-T2016
	Sergi Tarroc Gil (ST)	G4/EA-T2016
	Xavier Tió Malo (XT)	G4/EA-T2016
	Eva Maria Urbano González (EMU)	G4/EA-T2016

Date and time: 27th of October 2016, from 10:00 to 12:00

Place: SJ INTEXTER

AGENDA

1. Minutes of the last meeting approval
2. Oral presentations
3. Follow-up of the project
4. Next meeting

ITEMS ON THE AGENDA

1. Minutes of the last meeting approval

The last minute has to be approved

2. Oral presentations

VM and ST have to perform the oral presentation they agreed on doing last meeting.



Secció de Terrassa

3. Follow-up of the project

The team and customer have to be informed of the project developments

4. Next meeting

The place and time of the next meeting has to be decided



AGENDA OF THE MEETING 07

Project: Cubesat constellation

<u>Participants:</u>	Luís Manuel Pérez (LMP)	Projects Department
	Joan Cebrian Galan (JC)	G4/EA-T2016
	Pol Fontanes Molina (PF)	G4/EA-T2016
	Lluís Foreman Campins (LF)	G4/EA-T2016
	Roger Fraixedas Lucea (RF)	G4/EA-T2016
	Oscar Fuentes Muñoz (OF)	G4/EA-T2016
	Sílvia González García (SG)	G4/EA-T2016
	Fernando Herrán Halbelda (FH)	G4/EA-T2016
	Boyan Kaloyanov Naydenov (BK)	G4/EA-T2016
	Victor Martinez Viol (VM)	G4/EA-T2016
	David Morata Carranza (DM)	G4/EA-T2016
	Laura Pla Olea (LP)	G4/EA-T2016
	Marina Pons Daza (MP)	G4/EA-T2016
	Josep Puig Ruiz (JP)	G4/EA-T2016
	Josep Maria Serra Moncunill (JMS)	G4/EA-T2016
	Sergi Tarroc Gil (ST)	G4/EA-T2016
	Xavier Tió Malo (XT)	G4/EA-T2016
	Eva Maria Urbano González (EMU)	G4/EA-T2016

Date and time: 10th of November 2016, from 10:00 to 12:00

Place: EDIFICI TR5 – 2.1

AGENDA

1. Minutes of the last meeting approval
2. Oral presentations
3. Follow-up of the project
4. Next meeting

ITEMS ON THE AGENDA

1. Minutes of the last meeting approval

The last minute has to be approved

2. Oral presentations

JC, LF and DM have to perform the oral presentation they agreed on doing last meeting.



Secció de Terrassa

3. Follow-up of the project

The team and customer have to be informed of the project developments

4. Next meeting

The place and time of the next meeting has to be decided



AGENDA OF THE MEETING 07

Project: Cubesat constellation

<u>Participants:</u>	Luís Manuel Pérez (LMP)	Projects Department
	Joan Cebrian Galan (JC)	G4/EA-T2016
	Pol Fontanes Molina (PF)	G4/EA-T2016
	Lluís Foreman Campins (LF)	G4/EA-T2016
	Roger Fraixedas Lucea (RF)	G4/EA-T2016
	Oscar Fuentes Muñoz (OF)	G4/EA-T2016
	Sílvia González García (SG)	G4/EA-T2016
	Fernando Herrán Halbelda (FH)	G4/EA-T2016
	Boyan Kaloyanov Naydenov (BK)	G4/EA-T2016
	Victor Martinez Viol (VM)	G4/EA-T2016
	David Morata Carranza (DM)	G4/EA-T2016
	Laura Pla Olea (LP)	G4/EA-T2016
	Marina Pons Daza (MP)	G4/EA-T2016
	Josep Puig Ruiz (JP)	G4/EA-T2016
	Josep Maria Serra Moncunill (JMS)	G4/EA-T2016
	Sergi Tarroc Gil (ST)	G4/EA-T2016
	Xavier Tió Malo (XT)	G4/EA-T2016
	Eva Maria Urbano González (EMU)	G4/EA-T2016

Date and time: 17th of November 2016, from 10:00 to 12:00

Place: EDIFICI TR5 – 1.2

AGENDA

1. Minutes of the last meeting approval
2. Oral presentations
3. Follow-up of the project
4. Next meeting

ITEMS ON THE AGENDA

1. Minutes of the last meeting approval

The last minute has to be approved

2. Oral presentations

EMU and MP have to perform the oral presentation they agreed on doing last meeting.



Secció de Terrassa

3. Follow-up of the project

The team and customer have to be informed of the project developments

4. Next meeting

The place and time of the next meeting has to be decided



AGENDA OF THE MEETING 09

Project: Cubesat constellation

<u>Participants:</u>	Luís Manuel Pérez (LMP)	Projects Department
	Joan Cebrian Galan (JC)	G4/EA-T2016
	Pol Fontanes Molina (PF)	G4/EA-T2016
	Lluís Foreman Campins (LF)	G4/EA-T2016
	Roger Fraixedas Lucea (RF)	G4/EA-T2016
	Oscar Fuentes Muñoz (OF)	G4/EA-T2016
	Sílvia González García (SG)	G4/EA-T2016
	Fernando Herrán Halbelda (FH)	G4/EA-T2016
	Boyan Kaloyanov Naydenov (BK)	G4/EA-T2016
	Victor Martinez Viol (VM)	G4/EA-T2016
	David Morata Carranza (DM)	G4/EA-T2016
	Laura Pla Olea (LP)	G4/EA-T2016
	Marina Pons Daza (MP)	G4/EA-T2016
	Josep Puig Ruiz (JP)	G4/EA-T2016
	Josep Maria Serra Moncunill (JMS)	G4/EA-T2016
	Sergi Tarroc Gil (ST)	G4/EA-T2016
	Xavier Tió Malo (XT)	G4/EA-T2016
	Eva Maria Urbano González (EMU)	G4/EA-T2016

Date and time: 24th of November 2016, from 10:00 to 12:00

Place: EDIFICI TR5 – 1.2

AGENDA

1. Minutes of the last meeting approval
2. Oral presentations
3. Follow-up of the project
4. Next meeting

ITEMS ON THE AGENDA

1. Minutes of the last meeting approval

The last minute has to be approved

2. Oral presentations

SG and FH have to perform the oral presentation they agreed on doing last meeting.



Secció de Terrassa

3. Follow-up of the project

The team and customer have to be informed of the project developments

4. Next meeting

The place and time of the next meeting has to be decided



AGENDA OF THE MEETING 10

Project: Cubesat constellation

<u>Participants:</u>	Luís Manuel Pérez (LMP)	Projects Department
	Joan Cebrian Galan (JC)	G4/EA-T2016
	Pol Fontanes Molina (PF)	G4/EA-T2016
	Lluís Foreman Campins (LF)	G4/EA-T2016
	Roger Fraixedas Lucea (RF)	G4/EA-T2016
	Oscar Fuentes Muñoz (OF)	G4/EA-T2016
	Sílvia González García (SG)	G4/EA-T2016
	Fernando Herrán Halbelda (FH)	G4/EA-T2016
	Boyan Kaloyanov Naydenov (BK)	G4/EA-T2016
	Victor Martinez Viol (VM)	G4/EA-T2016
	David Morata Carranza (DM)	G4/EA-T2016
	Laura Pla Olea (LP)	G4/EA-T2016
	Marina Pons Daza (MP)	G4/EA-T2016
	Josep Puig Ruiz (JP)	G4/EA-T2016
	Josep Maria Serra Moncunill (JMS)	G4/EA-T2016
	Sergi Tarroc Gil (ST)	G4/EA-T2016
	Xavier Tió Malo (XT)	G4/EA-T2016
	Eva Maria Urbano González (EMU)	G4/EA-T2016

Date and time: 1st December 2016, from 10:00 to 12:00

Place: EDIFICI TR5 – 1.2

AGENDA

1. Minutes of the last meeting approval
2. Oral presentations
3. Follow-up of the project
4. Next meeting

ITEMS ON THE AGENDA

1. Minutes of the last meeting approval

The last minute has to be approved

2. Oral presentations

JMS and RF have to perform the oral presentation they agreed on doing last meeting.



Secció de Terrassa

3. Follow-up of the project

The team and costumer have to approve the decisions made by the coordinators of each sub team in the last coordinator meeting. They have to be informed of the project developments.

Decisions made:

- It is considered the constellation system not to be oversize.
If the number of satellites were reduced the continuous coverage of the ground stations would be compromised.
It is suggested to keep the actual configuration because it is robust, not too complex and offers the clients the possibility of having their own ground stations.
- A critical failure is defined to be when the client cannot connect with any satellite, a ground station loses its visibility or the communication route has to be reconfigured more than once due to a two consecutive satellite failure.
(The ground stations have been design to lose coverage when two satellites of two adjacent planes that arrive at the same time over the GS fail).
- Both constellation deployment and satellite department have to choose the propulsive system that guarantees the correct performance of the demanded actuations.

4. Next meeting

The place and time of the next meeting has to be decided