

# EUBERRY:

The sustainable improvement of European berry production, quality and nutritional value in a changing environment: Strawberries, Currants, Blackberries, Blueberries and Raspberries.

Kick off meeting

# MINUTES

26-28 September 2011

Regione Marche office, at Rond Point Schuman 14

(8<sup>th</sup> Floor ), B - 1040 Bruxelles





The EUBerry kick off meeting started and followed the agenda prepared by the coordinator. At the meetings attended 25 persons as listed in annex 1. All partners were represented only P11 was not able to attend the meeting because of the particular busy period of company activities, but it was represented by P5.

After a short introduction of the project from the Coordinator, a short presentation from Mylona Panagiota, Scientific Officer of the EUBerry project, was followed. After her presentation (see the link on web) started a general discussion and the following main thoughts were agreed: the activities of the project have to be addressed to reach the goals, tactics can be changed but in respect of rules. Plan properly all the activities in order to reach in time all deliverables. A proper plan of preparatory meetings and reporting plans should help in fulfilling all the main tasks in respect of the timing accepted in the project. Be in line with the rules in the preparation of the financial statements and give more information as possible in order to avoid problems and to reduce requests from the Commission.

### 1. WP LEADERS REPORT

After this general discussion the WP leaders introduced the main tasks and deliverables expected for each WP. At the end of their presentation was decided that each WP leader should prepare a short report of their presentation in order to be used for a better planning of the work from each partner. On the webpage will be uploaded all the presentations given by the WP Leaders and Partners.

#### WP1 Leader Rex Brennan

In short were identified the main aspects of the organization of the work for WP1, in particular underlining the importance to identify and quantify the genotypes for each species that all partners will include in their work as well as populations and existing markers to be used. Plant material and trial design has to be discussed. Genes available validation and functional studies on nutritional and flowering have to be identified and used.

Deadlines for Deliverables and Miles stones have been reported.

Links and plan of activities with subcontractors expected by different partners should be defined and properly started with signed contracts.

#### WP2 Leader Paivi Parikka

In short were identified the main aspects of the organization of the work for WP2, in particular underlining the importance of the description of the different deliverables. Almost all Deliverables from Wp2 are at 34 months, the first is at month 22 (D2.1 LED Use), and activities for all Deliverables have been already started.

WP2 has three Tasks and all Subtasks have already started at least in the preparation and set of the different fields and trials.

In Sub-task 2.1.1. Work on strawberry has been started by P6 (level and timing of nitrogen applications ) and P2 (regulated water application and different plant types). For raspberry and blackberry, P2subcontractor have collected the first results and P14 started trials on Blackberry in the south. In Subtask 2.1.2. P9 has made calculations for tunnel properties (covering properties, ventilation system and cultivation scheme) and the results will be used to choose the best materials for P14 and P13 trials. P8





has started trial with LED lights. Partners P2, P8 and P14 will share knowledge in LED experiments on berries.

In Sub-task 2.2.1 P8 has started trial on raspberry to develop a winter protection system and a low-cost device to control spring frosts is under development by P7-subcontractor. P2 has prepared experimental fields for further testing of the device. Trials on high temperature control on raspberry start in 2012 by P1 and P13. In Sub-task 2.2.2 trials have been started by P10 with primocane-fruiting cultivars and long canes for late production and long canes for early production. Also P8 has started work on the effect of autumn temperatures on raspberry physiology and flower development and observations of flower initiation and development on semi-highbush blueberry in higher temperatures has been started by P7.

In Sub-task 2.3.1 P9 has worked on improved biocontrol and integrated pest management (IPM) on Thrips and the first results are available. P2 has started trials on rationalization of pest management in berry crops in glasshouse production. IPM work on pests by P2, P9 and P14 is coordinated by P9. Biological control of raspberry pests has been started by P7 with work first concentrating on raspberry gall mite (Phyllocoptes gracilis), two-spotted spider mite and aphids on two cultivars in tunnel and open field. There will be cooperation of partners in mite control (P2, P14, P7, P11). P8 has worked on the effects of LED lights on the populations of arthropod pests and biocontrol agents. In Sub-task 2.3.2. P9 has worked on developing IPM strategies for disease control and the first results on grey mould (Botrytis cinerea) have been obtained. P7 has started work on utilisation of beneficial microorganisms in biocontrol of Phytophthora cactorum with greenhouse trials on selected isolates of endophytic bacteria and AMF mycorrhiza. P6 has started work on powdery mildew control with NDS with preliminary tests and P8 has made laboratory tests with LED light effects on *Podosphaera aphanis*. In Sub-task 2.3.3. P2 has started work to develop methods to identify strawberry cultivars that utilize water effectively and P1 has results to be presented of the effect of increased temperature and reduced water availability. Of nutrient use, especially nitrogen and phosphorous use in nursery cultivation, trials have been started (P1) and results will be ready in 2012. Raspberry trials on nutrient and water use efficiency will start by P1 and P13 in 2012.

Material for economical calculations for WP4 will be collected: comparison of in vitro planting material and normal material (P2); LED light experiments on strawberry and raspberry (P2, P8, P14);production methods on raspberry (P13), strawberry cultivars (dayneutrals- shortday ) in the south(P14);production in tunnels (P10;P13; P14), shading, type of plastic film (P13); low temperature stress on raspberry (P8); biological control on raspberry (P7) and IPM work (P9, P2, P14). Marketing strategies for blackberry are also included in WP4 work.

Partners will further cooperate on N-level on strawberry(P13, P14) and raspberry protocols (P1, P10, P13).

# WP3 Leader Derek Stewart

In short were identified the main aspects of the organization of the work for WP3, in particular underlining the importance to first deliverable expected at 6 Months: SOP – Standard Operating Protocols. The set of analyses performed by each partner and on which material, has to be identified.





An integration among partners should be considered considering the populations studies and elite material (not only CAT – but at least also TPH, ACY, Vit C) then the profiling study (HPLC o UPLC methods) for a reduced number of selected material and after deliver fruit of the selected material to partners involved in health validation studies. For all these analyses at all these steps well defined sampling, extraction and analytical protocols have to be used. Standard and appropriate criteria for reporting have to be defined.

### WP4 Leader Marianne Groot

Participants in WP4 already had a first meeting at Wageningen UR, but not with SMEs even if both have been contacted already. Thanks to this meeting some tasks already started. Specific focus will be given to the sensitive analyses in order to better verify what will affect the costs at specific changes (which changes to be considered will be defined). A specific study will be also addressed to the market structure and behavior. About Market strategies – SME can conduct home pilot work and applied results can be studied. The House of quality available at WUR will be used for the program.

### WP5 Leader Pedro Bras Oliveira

About WP5 was given only a small introduction considering that special section on this WP was planned for Wednesday morning. In particular it was outlined the importance to define a proper dissemination plan in order to give high visibility to the project – by considering for example links to other webpage at national and international level, promote a dissemination on local language, create links with national event.

Newsletters should have an important role in dissemination particularly for SMEs and growers, possibly by following what planned from different SMEs and other national realities. Create dissemination material for technical magazine – article and news.

# 2. PARTNERS REPORT

After the presentation from each WP Leader a report followed of the activities started and planned by each partner. The decision was to change the order of presentations and start with P14, the last partner.

# P14 – Pedro B. Oliveira

For P14 was reported a problem related to the starting of the contract but now it is solved so the project will start properly in time. For P14 the DOV should have a small amendment related to some changes in the research team, due to the retirement of some experts.

A short introduction on the material available and already in cultivation for the trials expected in WP1 for strawberry, raspberry and blueberry was give. The possibility to create a link with other local SMEs in this research was discussed and found of interest for the possibility to include in the trial some other patented cvs. Regarding WP2 were illustrated the field trials started for strawberry out of season production and raspberry late production, climate change and UVB trials. For blueberry tests on resistance to mices and diseases more common in Southern conditions, will be also carried out. Strawberry try plants will be also studied at 3 levels of nitrogen. For **WP3** SOP for fruit organoleptic quality will be developed and sent to Derek Steward, WP 3 Leader. Regarding **WP5**, a specific dissemination activity will be started in collaboration with a local Foundation specialized in the organization of technical schools. A link will be created with the Rubus and Ribes symposium. A list of publications will be created; a colloquium for Portugal activities will be organized. Video and other dissemination products will be provided.





**P13** – **Gianluca Savini.** The activities expected for P13 are mostly related to WP2 – in particular for tasks related to plant architecture (mainly strawberry and raspberry), to nutrition and production cycles. These activities have been already planned in collaboration with prof. Neri, expert for these tasks from P1. P13 activities to be carried out for tasks expected for P12 – Fruitmaster (the company that withdrawn from the project), have been discussed and agreed. For WP3, P13 will provide to P9 fruit samples as expected for the experiments planned by P9, while for WP4 a discussion and plan of activities has been already started with Marianne Groot (WP4 Leader). P13 offered the availability to host a WP2 meeting for the next March 2012 and explained the project to growers and market chains.

**P11 José F. Sánchez Sevilla** – The activities expected for P11 Freson de Palos were presented by José F. Sánchez Sevilla (P5), this because of the particular intensive period of activities of the company no direct representative of P5 was able to attend the kick off Meeting. The starting of the field trials expected for P11 in WP2 was confirmed and also in this case the availability to be involved in some tasks of WP4 was confirmed. In fact a particular interest was expressed in the definition and study of new marketing strategies, this because there is already a decision of the company to start an attempt of a new marketing strategy by using fruit nutritional claims.

P10 Erika Kruger – Experiments have been already set up with commercial and pre-commercial material to be used for phenotyping studies. Ecophysiological studies have been started in plastic tunnel - UV permeable plastic film (luminance). The effect of these different cultivation conditions will be tested on the amount of bioactive compounds on fruit but also leaves. For raspberry open field and tunnel production trials have been started and will be compared, by using either junebearing or primo cane varieties. All these trials will be combined also with other trials in other locations for the study on climate changes. Regarding WP3, SOP for the different protocols used for sensorial and nutritional analyses will be provided. In exploring the possibility to have a subcontract for analyses on fruit aroma, as expected in the project, emerged the necessity to consider the laboratory able to provide this service as partner and not as subcontract. This can give to the new laboratory a better capacity of integration in the project with a more direct interaction with the different partners that are involved in such type of studies expected for WP3. For this reason the team Leader of P10 asked to have a new partner for the project specifically addressed to such WP3 task and expressing the availability to share the P10 budget with the new partner. Everybody agreed and so it has been asked to P10 Team leader to prepare a proposal for the inclusion of the new partner, to be added in the amendment of the project. P10 also started collaboration with WP4 Leader for defining the research study on marketing. About local dissemination P10 will organize open day in German with local growers and local stakeholders.

**P9** - **Gijs van Kruistum** – Most of the activities for P9 will be on WP2, but specific contribution will be given also for WP3 and 4. The main aim in WP4 is on the reduction of the cultivation impact on the environment, in particular what related to the level of residues, alternative methods to control pests and diseases (monitory trips – predatory biological control – strategies for lure and retain natural enemies). Most of the work will be on strawberry (Elsanta and Sonata cultivars). Such kind of studies a important for dissemination – high consumer policy attention on it. All what tested is passed-approved at EU Level. A specific link will be started with **Pure** another project initiated in the same call specifically addressed to such topic. DSS already available for Botrytis will be tested and validated also for Oidium. In WP2 an expert from DLO-WUR (Stanghellini) will also contribute to the calculations for greenhouse cultivations. For WP3 SOPs for sensorial and nutritional analyses will be provided. Post harvest studies





will be carried out as expected. A system for health validation studies based on cut cells for digestion will be also used. About dissemination a special link will be created with Timbau, a semi public organization working almost with all food chain so to have a higher impact on the dissemination of results. Activates about WP4 were described by Marianne Groot in the presentation of WP4 activities.

**P8 Rolf Nestby** – Activities for WP1 are started and the expected subcontract already well defined. Studies on the interest of wild blueberry, now available on the market, as an important source of traits have been also started.

Activities for WP2 have been also started for strawberry, in particular for LED energy saving lights, humidity and radiations. Effects of the lamps will be studied also on populations of mites and Oidium. In long cane raspberry and black currant experiments have started to study plant physiology and architecture. Dissemination activities will be planned in collaboration with the different groups working in Bioforsk.

**P7 Paivi Parrika** – The activities expected by P7 were presented by the team leader during the presentation of WP2 activities. In fact, most of the work will be included in WP2, working on plant adaptability to northern conditions, resistance to frost (in this case a specific device produced by a company will tested and validated). The other most important activities will be related to the pest and disease monitoring and control systems in Northern conditions. Activities for Wp1 and 3 have been also started in particular for the studies on genetic resources of different berries and their evaluation for the productive and quality traits. Local and national dissemination activities will be planned.

**P7** Paivi Parikka – The activities expected by P7 were presented by the team leader during the presentation of WP2 activities. In fact, most of the work will be included in WP2, working on plant adaptability to northern conditions, resistance to frost (in this case a specific device produced by a company will tested and validated). The other most important activities will be related to the pest monitoring and biological and integrated control systems on raspberry in Northern conditions and biological control of soil-borne diseases on strawberry. Activities for Wp1 have been also started in particular for the studies on genetic resources of different berries and their evaluation for the productive and quality traits. Local and national dissemination activities will be planned.

**P6** – **Béatrice Denoyes-Rothan** – Most of P6 work will be for WP1. The database developed from the DGAGRI Generes project will be used and implemented for this new project. New molecular markers will be developed and validated. Existing markers for nutritional marker will be validated also with populations available from other Partners, for this a list of markers to be validated from other groups will be created. Also for WP1 a construct with a key gene controlling flowering has been already produced and in short transferred to P1 for starting the transformation experiments. For WP2, a study on plant development for strawberry (cv Charlotte) season extension has been started by planning different date of transplant. A subcontract has been already defined in order to complete the work with more detailed physiological studies. Disease management with the use of oil essential as resistance stimulator will be also included. Local and national dissemination activities will be planned.





**P5** José F. Sánchez Sevilla – The activities expected for WP1 on genetic resources and evaluation of new material was already started and from the next early harvest analyses on strawberry nutritional value will be started. Populations are already available to be considered and put in the field for segregation studies. A paper on such studies has been already published. New material will be identify to be evaluated by P3 (WP3). SNPs and DarTs from over 64 different accessions are already available and will be increased to 96. Microarray analyses in genes validation studies will be carried out. Local and national dissemination activities will be planned.

**P4 Claudia Nunes dos Santos** – Activities of P4 will be mostly addressed to WP3 studies on health validation. The main study will be on neuroprotective role of polyphenol. Studies with flow cytometer to analyze the change of death cell promoted by berries digested extracts, the effect the digested extracts on ROS by direct scavenging or the indirect promotion of ROS scavenging, changes in cellular redox state GSH/GSSG will be applied by using selected type of berries provided also by different Ps. Other activities will be carried out in collaboration with other Ps, also on human in vitro digestion model showing a large reduction after digestion. Local and national dissemination activities will be planned.

**P3 Rex Brennan** - P3 activities will be mostly related to WP 1 and 3. About WP1 a specific work on breeding and molecular tools applied to breeding programs for raspberry and black currant are already started. A link on the blueberry breeding program started by P1 in collaboration with a subcontract has been created. As well as the collaboration with a subcontract providing strawberry populations has been also defined. About Wp3, most of the work will be on biochemical profiling of the elite material that will be provided also by other Ps and also in specific research programs addressed on health validation (neurodegenerative, digestive and cardiovascular diseases), always in collaboration with other Ps. P3 will also have a specific role in organizing dissemination material (videos and podcasts) to be used for the web page and other dissemination activities.

**P2 Edward Zurawicz** - P2 activities already started for WP1 with the availability of germplasm of the different berries to be included in the evaluations expected by this project and also for the validation of different molecular markers. For WP2, specific activities have been started for the control of plant development in local climatic conditions but also to test compare the stability of blackberry and raspberry micropropagated in comparison with in vivo propagated plants. For such type of study a specific list of physiological parameters, production, quality, disease resistance, will be evaluated in combination with cytological studies. The production costs and in vitro production efficiency will be also analyzed. This work will be carried out in collaboration with a subcontractor. Other activities will be related to studies on harvesting extension of strawberries and raspberries, the reduction of frost stress in strawberry and blackcurrant, pest biocontrol in strawberry, improved substrates for strawberry growing. All these activities have been already started. About WP3 SOP for external berry fruit quality will be provided and tested for the evaluation of fruit quality of the different germplasm available. Post Harvest studies will be carried out on hypobaric and CA storage treatments. Local and national dissemination activities will be planned.





P1 Bruno Mezzetti – P1 activities for WP1 have been already started with the evaluation of strawberry germplasm collection and preparation of a new field for the next year evaluation. A new collection of blueberry accessions, possibly with higher adaptability to southern conditions, have been started. This work has been started with a subcontractor. Strawberry breeding populations have been selected and will be available for the next year studies. In vitro material of strawberry Calypso (EB) and Sveva (SD) cultivars is ready to start regeneration and transformation experiments when new construct from other partners will be available. In WP2 a detailed plan of studies to be carried out in strawberry, raspberry and blackberry has been defined in collaboration with P13 and other partners involved in studies on plant architecture, substrates and production cycles. In WP3 SOP for sensorial and nutritional studies have been already prepared and will be delivered to the group. Data available from this year nutritional analyses will be used to select fruit to be delivered to P3 for biochemical profiling and to P3 and P4 health validation tests. A cross lab. analyses will be organized by P1, by providing a fruit samples of one strawberry cultivars to all labs performing sensorial and nutritional analyses, so to validate and test the lab. Variability in analytical results. In this study a specific protocol for fruit sampling, treatment (freezedried) and expedition will be tested. A first year trial on pre-harvest treatments and post-harvest cultivar susceptibility has been started on strawberry. A set of experiments is already programmed for the next year also in collaboration with P9. A specific plan of dissemination activities will be planned with the group. The management activities have been started and will be carried following rules and deadlines expected by the project.

# **GENERAL DISCUSSION**

At the end of Partner presentations a general discussion was started and following the indications of the Scientific Officer were identified the main new changes of the project to be considered as amendments of the DOV already submitted.

Following is the list of **amendments** that have been accepted and that will be proposed for the new project DOV:

- 1) P12 Fruit Masters will be deleted from the project because has decided not to sign the contract.
- 2) Activities expected from P12 will be reallocated to P11 and 13, both partners have expressed the availability to share the work expected for P12 and after a discussion it was possible to verify the fact that studies expected for P12 can be carried out partially by P11 and P13 without affecting the initial results expected for the project even if located in a different geographical area in comparison with P12. This problem has been discussed mostly for tasks expected for WP4 regarding the production costs and marketing strategies. The conditions of P13 can be considered with high similarity with what was expected for P12, while for the marketing strategies, what expected for P12 can have a similar impact if carried out from P11 because this company has an high impact on the EU market so their studies can be expanded in different EU areas as was expected for P12.
- 3) P10 proposed to consider JKI, a German institution contacted as potential sub contractor for the WP3 aroma studies, as new partner of the project. This can give to the new laboratory a better capacity of integration in the project with a more direct interaction with the different partners that are involved in such type of studies expected for WP3. The project DOV will be amended by the inclusion of the new partner description, tasks related to aroma will be addressed the new





partner, P10 budget and man-months will be shared with the new partner. The new JKI partner will be named P12 and registered with the PIC number.

- 4) Some partners (P14 and other) will revise the list of the research team by modifying names now not more available for the project
- 5) Considering the department reorganization occurred for P1, the new name of the department and new bank account will be included.

The new project DOV with these amendments will be submitted to the Scientific Officer by October 15.

The discussion continued on the preparation of the Consortium agreement, such document is not requested but recommended by the commission to clarify and anticipate problems that can occur in the management of the project and also exploitation of some outputs with industrial applications. It was decided to use the DESCA template of consortium agreement, to adapt it to the EUBerry project and propose to all partners for the signature.

A specific discussion was carried out also for the type of time sheets to be used for recording the man – month activities. The general agreement was to use the type of time sheet already commonly used by each partner and possibly to simplify it with the inclusion of all activities of the research team in one time sheet.

For the WP activities was decided to provide as soon as possible all the possible information on the plant material that will be included or is already included in the different trials, the parameters that will be analyzed and protocols that will be used.

On Wednesday Morning the discussion was enlarged also to the participation of Dalibor Vojta (Legal Officer of the Project). A more specific discussion on legal and financial issues of the project was carried out, in particular on how organize the new project DOV with amendments described above; travel abroad EU can be accepted if with a benefit for the project (presenting data to international conferences); group team can travel with the project budget only if with a regular contract on the project; students involved in the project can be considered out of the time-sheet; a time-sheet only for the project can be accepted and it is suggested; the budget can be reallocated and changed as we want but with a justification and a description of the costs; a standard files can be used by the coordinator to collect all partners financial reports and then transfer the full information on the project webpage reporting system. The project is now planned to have 3 reporting periods: at 12 months, at 24 months and at 42 months. If a possible 6 months extension will be asked and accepted by the commission there will be a 4<sup>th</sup> 6 months reporting period and clearly also the final reports.

At the moment the reports timing is the following:

- 1. May 2011 May 2012 (1<sup>st</sup>)
- 2. May 2013 (2<sup>nd</sup>)
- 3. November 2014 (3<sup>rd</sup>) and final report
- 4. April 2015 (4<sup>st</sup>) and final report if there will be an extension

# WP 5 DISSEMINATION

The last section of the kick off meeting was dedicated to discuss and plan the dissemination activities. All the different tasks expected for WP5 were discussed and the main items confirmed.





The plan of meetings expected in the project table 2.1 was discussed and a first concrete draft of the main meetings was decided.

Up to now (Month 5) have been organized the first Web Conference (month 2) and the project Kick off (Month 5) meeting. A delay in the organization of the kick off meeting was due in the delay occurred at the beginning with the signature of the contract and also to the problems encountered during the summer to find a date available for all partners considering that all were busy with field activities and conferences.

For the next meetings the following plan was decided:

# 2012 - Meetings

- Workshop 1 on cultivation systems (WP2) March 2012 month 11 organized by P13 Sant'Orsola (IT) – red zone, opened to growers association and industries.
- Management meeting a WP Leaders meeting aimed to set up the first year Reporting period. It will be hosted by P14, in April at Faro PT (red zone) and will be combined with a training Colloquial addressed to local SMEs.
- Generally Assembly to be expected in June 2012, possible location Venlo NL green zone, if it will be possible to have space in the ISHS Symposium on Superberry. Colleagues from P9 should explore this possibility, if it will not be possible another location will be identified

### 2013 - Meetings

- 1) Germany (April end June 2013) or France (September-October) (green) School 1 General Assembly– Advisory Board green zone.
- 2) Workshop 2 WP meeting Norway blue zone

### 2014 Meetings

- Spain/Huelva red zone March School 2 General Assembly Advisory Board
- Work shop 3 : WP1 and 3 Breeding biotech biochemistry, Ancona IT (red zone)
- Final Meeting Nov 2014 or April 2015 Poland

The discussion continued with following points:

- Web Page. What started has to be implemented with a better organization of the different sections for WPs and the addition of a restricted section for internal reporting. A list of stakeholders with links to their WebPages, ask to stakeholders to include in their webpage a link to the EUBerry webpage. All press releases, newsletters and podcasts. A section on news should be continuously updated also with news in different languages.
- **Newsletters.** A first newsletter should be prepared in short including information on the kick off meeting and the starting of the project. P1, 3 and 14 are responsible on the preparation of the newsletter as planned in the project and should then be disseminated by all partners.
- **Podcasts.** A program for podcasts should be prepared, either from the next general assembly including an interview of each partner team leaders. Podcasts of different activities organized from the different partners should be organized. P3 will be responsible to organize the podcasts that will be uploaded on the webpage.





• **Stakeholders.** For each meeting and dissemination activities the involvement of stakeholders should be promoted.

No other issue aroused from the discussion and the EUBerry kick off meeting was ended.





Allegato 1: List of participants to the EUBerry kick off meeting.

1	Bruno Mezzetti	IT	P1
2	Franco Capocasa	IT	P1
3	Jacopo Diamanti	IT	P1
4	Francesca Balducci	IT	P1
5	Malgorzata Korbin	PL	P2
6	Edward Zurwicz	PL	P2
7	Agnieszka Masny	PL	P2
8	Agnieszka Pelka (1st day admin.)	PL	P2
9	Rex Brennan	UK	P3
10	Derek Steward	UK	P3
11	Claudia Santos	PT	P4
12	José F. Sánchez Sevilla	SP	P5
13	Maria Soria	SP	P5
14	Béatrice Denoyes-Rothan	FR	P6
15	Paivi Parikka	FI	P7
16	Saila Karhu	FI	P7
17	Rolf Nestby	NO	P8
18	Marianne Groot	NL	Р9
19	Gijs van Kruistum	NL	Р9
20	Jurriaan Mes	NL	Р9
21	Erika Kruger	DE	P10
22	Savini Gianluca	IT	P13
23	Pedro B. Oliveira	PT	P14
24	Mylona Panagiota	BE	FP7 SO
25	Dalibor Vojta	BE	FP7 FO