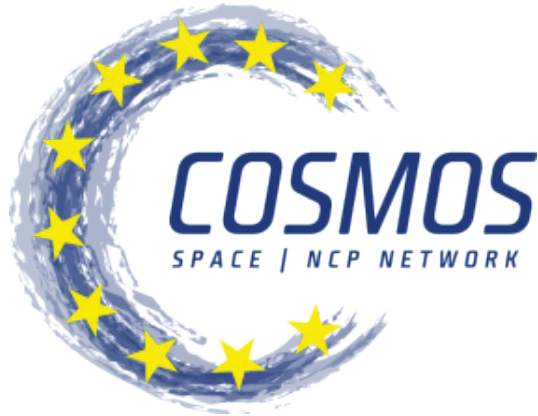


Final Report on COSMOS+

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Foreword

COSMOS+ based very much on the experiences made under the forerunner project COSMOS. Some tasks were sustained and some changed. The transfer from FP7 to Horizon 2020 provided particular challenges with influence on the COSMOS+ work programme. Through a highly flexible approach the consortium could adapt to all unforeseeable situations like person or even partner changes but also the availability of European Commission staff for events, etc. and optimise their work. Nevertheless, not all results were as rich as expected. This already influenced the description of activity of the follow-up project COSMOS2020.

The results of the project work are more or less completely reported within the reports which were submitted as deliverables. This is why this report just provides an overview on the most important aspects and conclusions.

Project objectives

COSMOS+ generally aimed at interlinking the National Contact Points for Space to improve and more balance the overall quality of NCP services, to add central services and finally to raise the average quality level of submitted proposals.

The main objective of WP 1 “Integration” was to even chances for all FP7 participating countries and regions. But it also aimed at better integration of so called “3rd countries”, of SMEs and last but not least it aimed at gender issues.

The main objective of WP 2 was to foster contacts with respectively between three different groups: Firstly among the COSMOS+ partners through an exchange scheme, secondly with “3rd countries” through a mentoring scheme and thirdly with Space key players.

The main goal of WP 3 was to improve the knowledge and skills of the Space NCPs and to provide them with time and person independent up-to-date information how they could perform certain duties.

The main objective of WP 4 was to ensure a smooth transfer of Space NCP services to post 2013 Space funding. The evaluation of the FP7 Space call results aimed at supporting the integration issue and preparation of NCP Space services for Horizon 2020.

The objective of WP 5 was to provide information about COSMOS+ and raise awareness also for FP7 / Horizon 2020 Space and related topics.

The objectives of WP 6 were to steer and control the project mainly in terms of finances and to keep the COM / REA informed about the work progress and budget details.

Achievements

WP 1 Integration

Task 1.1 Assessment of integration status

This task was foreseen to end within the first reporting period. Nevertheless, due to some delays the deliverable could just be finalised early during the second reporting period. This is why it is addressed here.

As explained in the dedicated report the outcome of the assessment of the integration status was less exciting than expected. This might be the result of a missing expert methodology which some partners are sure would have led to other results. The finally chosen approach was rather simple and straight forward. It showed that just Slovakia and Turkey are clearly underperforming related to their potential which was related to the size of their population and their gross domestic product. All other countries are more or less in range of what can be expected. Furthermore no Space particularity could be observed since the FP7 overall results do not qualitatively differ from the Space results.

Other aspects like the roles of the partners in the consortia will be considered for further investigations under COSMOS2020. This was agreed at the final COSMOS+ meeting in Antwerp, Belgium, in November 2014. This will be subject of a discussion at the kick-off meeting as well as potential other aspects or methods.

Deliverable 1.1 Report about integration assessment

Task 1.2 Actions to improve integration

Since the outcome of task 1.1 did not require urgent action for several countries (as was expected) this task caused less much work than foreseen. But the meaning of “integration” under this task did not just comprise countries’ successes but also SMEs, international partner countries (“3rd countries”) and the gender aspect.

A list of potential participation hurdles whereof which some were specific for newer EU member states had already been created under COSMOS. Within the first reporting period the listed points were “answered”, i. e. suggestions to overcome those hurdles were made. Regarding SME integration the COSMOS SME help document was updated and cooperation with EEN enforced. A document on Gender issues had been delivered. International partner countries were invited to all basic trainings and events on a travel cost reimbursement basis but the response was less good than expected. Contact persons had changed in several cases or could simply not make it.

But also integration of EU member states or Associated Countries was addressed. A general means was the countdown tour which served information about what would come under Space in Horizon 2020 and bringing people together. This covered most European regions. The Space NCPs from the underperforming countries SK and TR were furthermore contacted and their particular situation was addressed. This resulted in a partnership of SK in COSMOS2020. Joint infodays of CZ and SK directly aimed at better integration. TR organised their own information tour covering 15 cities in TR with almost 600 participants.

Deliverable 1.6 Report about integration actions

Task 1.3 Evaluation of actions to improve integration

The evaluation of the actions taken was neither an easy task because of the decent result of task 1.1. For the first deliverable the task team evaluated a means that was implemented for the final event under COSMOS. Here mainly SMEs from newer EU member states and Associated Countries were offered travel cost reimbursement. This way the opportunity to learn about European Space activities, players and structures as well as matchmaking was given for them. The response was very positive as can be seen in deliverable 1.3.

Within the second reporting period the above mentioned activities related to EEN, SK, TR and the “Countdown tour” resulted in mixed success. Under COSMOS2020 EEN plays a much bigger role and since partners APRE and FORTH are also EEN and active in the Aeronautics and Space sector group it is guaranteed that cooperation will work well. SMEs will surely benefit from this. The result of the first Space call under Horizon 2020 was unfortunately not very successful for TR and SK. TR had 4 participations in 3 projects from 12 proposals where TR organisations were involved. SK succeeded with 3 participations in two projects out of 14 proposals with SK participation. But the SK NCP is now partner of COSMOS2020 and even the kick-off was organised in Bratislava where even an infoday including a discussion on participation success was held. For TR the consortium is still looking for a suitable support measure but is considering a special feature on TR at an international COSMOS2020 event in Europe. This will ensure higher participation from European actors and might thus be more efficient than an event in TR.

It was also suggested to create a pool of scientists from TR (or SK) working in other European countries. These should typically be open to cooperation with organisations from their home countries and may even already have their personal contacts. This could create a critical mass and a higher acceptance of TR or SK partners since a lack of acceptance could be one of the reasons for the low success.

Deliverable 1.7 Report about evaluation of integration actions

WP 2 Fostering Contacts

Task 2.1 Bi- or multilateral exchange

Within the second reporting period just few cases of exchanges occurred. The Baltic partners joined the Space infoday in Vilnius, Lithuania which was the first event of the Countdown to Horizon 2020 Space tour. Some more visits of partners at tour events in other partners’ countries took place but were not really organised in context with task 2.1. The Aerodays in Lisbon in 2014 brought together the COSMOS+ partners e. g. from IT and PT and the EEN Aeronautics and Space sector group.

It can be assumed that the low activity under task 2.1 resulted from the other activities under COSMOS+ which kept the partners very busy. The task team had discussed to circulate a call among the partners. This had been the concept under COSMOS for the forerunner task which just focussed on mentoring pairs. Since this time travel budget was much shorter (while under COSMOS €million 2

were available in total the COSMOS+ budget was just half the amount) and no particular travel budget for the exchange scheme was available it was decided not to launch a call but to wait if partners would come up with interest in exchange.

Nevertheless, it is still seen essential to have such exchange scheme and be able to react flexible to upcoming demands. Under COSMOS2020 some rules are more concrete now. At least three Space NCPs, not necessarily all partners of the project, have to submit a concept and if the meeting is realised a report about it has to be submitted afterwards. Additional relevant actors can be involved. Partners have to use their own travel budget which was calculated on an according basis.

Deliverable 2.4 Report about exchanges

Task 2.2 Linking with 3rd countries

Activities under task 2.2 were limited to a certain extent. The transfer phase from FP7 to Horizon 2020 kept the NCPs very busy and caused difficulties in organising missions to International Partner Countries (IPCs). Unfortunately also the trials to have contacts from those countries at COSMOS+ basic trainings and events were not very successful. Just visits of the US and JP contacts to the Brussels kick-off of Horizon 2020 Space in December 2013 and a visit of the Ukrainian contact to the Rome infoday in 2014 could be realised.

The Ukraine crisis increased the challenges with Russia and the Ukraine but also staff changes of several contact organisations led to difficulties.

Improvements were reached in the attempts to establish contact with Brazil. Even if no mission was organised yet it is planned for first half of 2015 under COSMOS2020. With the support of the European Commission at least sustainable communication could be established. It shows again that cooperation between the NCP network and the cooperation can be essential.

South Korea was able to launch their own satellite in 2014. They thus reached the status of Space faring nations and accordingly joined the target group of IPC countries of COSMOS+. By lucky incidence they organised two Horizon 2020 infodays and invited European NCPs, among them the coordinator of COSMOS+. Finally, partner FCT and FORTH supported the events with their presentations and could thus make first contact with South Korea.

Even though some contacts became or remain difficult, in most cases the basis for reinforcing contacts under COSMOS2020 is good.

Deliverable 2.5 Report about 3rd country activities

Task 2.3 Involvement of Space key players

As within the first reporting period Space key players were approached and could be convinced to support COSMOS+ activities through their appearance at events with presentations or with hosting training sessions as site visits or even with sponsoring events. This involvement is of high relevance for the NCP work as it can motivate other actors to attend events, enables better events involving higher costs and widens the view of the NCPs who learn about the key actors but also about some of

the Space topics which are addressed in the work programmes. It was clear that this should be sustained and therefore COSMOS2020 is running an according task as well.

[Deliverable 2.6 Report about Space key players involvement](#)

WP3 Good Practice

Task 3.1 Basic Trainings

Three basic trainings were held in total, two of which in the second reporting period. The second basic training was organised in December 2013 in Brussels as part of the kick-off of Horizon 2020 Space event and with an additional questions and answers session with the COM and the REA. The last basic training session was held in September 2014 in Rome and mainly comprised in the participation in the “Let’s embrace Space” FP7 Space review conference and the infoday.

In general these trainings should serve basic aspects for the work as NCP Space. Under Horizon 2020 basic information like on participation rules or gender issues will be covered by an “NCP academy” run by the umbrella NCP network and the legal and financial NCPs. Nevertheless, some Space specific basics e. g. about the call content will surely still be addressed within COSMOS2020 trainings.

All basic trainings were well received. The constantly high number of participating Space NCPs with over 20 persons proved their relevance.

[Deliverables 3.4 and 3.6 Report about basic training](#)

Task 3.2 Advanced Trainings

Three advanced trainings were held in total, two of which in the second reporting period while the second (in Bonn, Germany in 2013) was also already reported. In all cases the Space NCPs met national Space key players and visited some organisations or companies. The NCPs profited from this through learning about the European Space landscape and meeting the key actors and seeing in live what certain actors are doing. The other advantage of this training concept was that it served dissemination since the key actors met also recognised their visitors as COSMOS+. This finally helped the linking with key actors for other purposes as described under task 2.3.

[Deliverables 3.5 and 3.7 Report about advanced training](#)

Task 3.3 Updating COSMOS handbook

Since COSMOS+ fell in the transfer phase from FP7 to Horizon 2020 it was useful to work over the FP7 specific content of the handbook. Furthermore a chapter on the new SME instrument was added. The new content will be sustained in the form of an intranet for the Space NCPs under COSMOS2020. This will then be regularly updated and if suitable added with new relevant information.

[Deliverable 3.3 Updated COSMOS handbook](#)

WP 4 Transfer to FP8

Task 4.1 Analysis of FP7 Space call results

The analysis of the FP7 Space call results is something that is done in many countries and in some by the Space NCPs. This way the responsible institutions can follow if something has to be done to improve national participation to the EU research framework programme or if the results are at least acceptable. Under COSMOS+ the analysis performed within the first reporting period built the basis for the assessment of integration (task 1.1). At the end of the project runtime an update was useful since just then almost final data from FP7 Space could be used for a final analysis. Practical work on the data again showed practical problems. Since the PIC numbers are established data quality improved a lot but before that (mainly the first call) proposal data could hardly be used for reliable results without major corrections if possible at all. Proposers very frequently didn't enter correct data for their own organisations or at least used different names for it. Another problem is how to consider international organisation like ECMWF, UN organisations, EUMETSAT or JRC. The latter are a particular case since in the proposal database they are considered Belgium (except one case where they are Italian) but in the project database they are listed as "EU" under the country category.

The updated analysis mainly showed that competition within the last calls increased. This could be seen in the success rates which generally decreased. An additional evaluation of the success of international partner countries showed that Russia performed best, followed by the Ukraine and South Africa. These countries were specifically addressed in particularly calls.

Under COSMOS2020 regular analyses will be done as soon as call results will be available. This way the network can follow the situation more closely and react sooner if obvious aspects appear like too few SMEs or international partner countries participating or major underperformances of countries.

Deliverable 4.4 Report on the analysis of FP7 Space call results

Task 4.2 Regional awareness activities

Task 4.2 was planned much smaller than it was finally performed. The idea was to allow a group of partners covering a European region with smaller information events on Horizon 2020. Finally the countdown to Horizon 2020 Space tour resulted which was a major success and served the original aim even better. Core of this tour success was the central registration and promotion via the b2match tool. It was unusual to use the tool for more than one event at the same time and thus the provider had to adapt it for the COSMOS+ case. Luckily this went very well.

Even though the particular use of the tour was to inform about a completely new EU research framework programme the partners meanwhile started discussing if a similar concept should be followed at least when new work programmes (i. e. every two years) are published during the COSMOS2020 runtime. This was not foreseen in the proposal but will be discussed during the starting phase of COSMOS2020. The concept should at least be repeated before the next EU research framework programme.

Deliverable 4.2 Report about regional awareness activities

Task 4.3 Kick-off of FP8

The kick-off event for Space under Horizon 2020 was organised in Brussels on the publishing date of the first Space call under Horizon 2020 in December 2013. It was organised as part of the countdown tour. The main organiser was the European Commission but COSMOS+ contributed many details, suggested the venue and supported the colleagues during the planning phase as well as during the event. The matchmaking session was fully organised by the NCP network. Almost 500 persons attended the two-day event and feedback was very positive, including the one from the European Commission. It can be said that this concept was very good and provides an excellent template for future joint events. Accordingly, COSMOS2020 foresees more such events in cooperation with the European Commission in Brussels.

Deliverable 4.3 Report about FP8 Kick-off

WP5 Information and awareness activities

Task 5.1 Website

While the working team had just planned an update of the former website the network had jointly decided that a more professional and modern designed website would be needed. A new logo and website was thus ordered and set up. This will be sustained for COSMOS2020. The main logic remained to provide a useful information resource and not just inform about the project.

The website was regularly updated with the news announcements that were sent out with the newsletter. The helpdesk-site had to be worked over during the second reporting period. User statistics show that it is accessed with peaks close to COSMOS events. Also people outside the EU visit the website. Nevertheless, the NCP network aims at putting even more effort on the website and e. g. implement the country websites which were already considered but not yet realised under COSMOS+.

Deliverable 5.6 Short report about the website

Task 5.2 Newsletter

The newsletter concept remained the same as under COSMOS. It is published not on a regular basis but whenever news comes up or some less time critical announcements summed up. This will be continued under COSMOS2020. This is then supposed to be flanked by other modern media means like twitter or social networks.

The growing number of registrants shows that it is accepted and found useful. It would though be good to motivate more partners to contribute with news. This is a task for the next funding phase.

Deliverable 5.7 Short report about the newsletter

Task 5.3 Events (Infodays / Matchmakings)

Under COSMOS+ three infodays were organised. The last FP7 Space call infoday took place at Surrey University near London and provided the first major activity of COSMOS+. After the countdown tour which in fact comprised a series of infodays including matchmaking two more events on the second Space call under Horizon 2020 were co-organised. In Toulouse the network had the chance to hold an infoday as part of the Toulouse Space Show in July 2014. In September 2014 the COM organised a number of Space related events in the same week in Rome. Here the COSMOS+ team supported in information day via consulting and organising the matchmaking part.

Close cooperation of the network with the European Commission again proved more than useful and very successful. The NCP network is meanwhile recognised as competent partner. Unless e. g. COM staff change will lead to changed minds the well-established cooperation should definitely be sustained and continued under COSMOS2020. If the NCPs do not decide for the tour concept, the idea will most probably be to support a yearly information day in Brussels organised by the COM and another bigger event in changing locations in Europe (or associated countries).

Deliverables 5.8 and 5.10 Report about event (Infoday / Matchmaking)

Task 5.4 Brochure

Promotion via brochure was critically discussed at the beginning of COSMOS+. Several partners were of the opinion that brochures are outdated and will immediately be thrown away if someone takes it at all. It was though decided to have at least something smaller that can also be put on the website in electronic form. This resulted in a two pager in form of a flyer comprising information about the NCPs, the network project and some basic information on Horizon 2020 Space. Since it does not contain a list of the partners it is sustainable and will also be used for COSMOS2020. Minor changes can easily be made if necessary and all partners can print it out for their own events to promote the NCP Space network.

Deliverable 5.4 Brochure

Task 5.5 Representation at events and PR activities

Activities under task 5.5 concerned cooperation with the Aerospace Sector group of the European Enterprise network and promotional activities at a variety of national and international occasions. APRE as COSMOS+ partner and member of the relevant sector group of EEN took care that both parties met a couple of times. Based on this cooperation under COSMOS2020 will be enforced. Promotion of the NCP network was of course done during the 12 events organised by COSMOS+ or with COSMOS+ support. This reached some 2.100 participants from 41 countries. In addition to this the partners promoted the project within some 100 events and meetings mostly at national level.

Deliverable 5.9 Short report about the representation at events and PR activities

Project management

Within the second reporting period two Management Meetings were organised, one in June 2013 in Bonn, Germany, one in September 2014 in Rome, Italy. Two Steering Committee meetings were held, one in September 2013 in Brussels and one in November 2014 in Antwerp, Belgium along with the final meeting. Attached to this last meeting a review meeting with the REA and COM was organised.

Three amendment cases had been dealt with within one request procedure. Since December 2013 STIS-BELSPO (BE) was new partner while partner ReSac (BG) had to leave the consortium in January 2013. In the UK a partner change required an amendment.

Deliverable 6.3 and 6.8 Management Meeting minutes

Deliverables 6.10 and 6.12 Steering Committee Meeting minutes

Deliverables 6.9 Meeting with EC minutes

Problems which have occurred and how they were solved

In the first reporting period the Turkish partner changed staff and didn't nominate a new NCP Space for several months. This was reported in the according first report.

The Serbian partner first hindered their NCP Space in travelling. This was also reported in the first report. In the second period the partner remained passive. They had an interim Space NCP as contact but it was not clear who and if a new NCP would be nominated at all. Finally another organization became NCP Space. It was agreed that from then on the official partner would remain passive and the new NCP could join events on a cost reimbursement basis. This approach proved very useful and the according NCP participated in two trainings. Since the partner didn't have a major role this didn't have relevant impact on the project.

In the last year of the project runtime the UK restructured their NCP system. In this context the organization running the NCPs was changed. A partner change resulted for COSMOS+. It was first planned to keep the same staff but after a short time the NCP Space decided to change jobs. Since then it took the new organization until November to have new staff for this position. Therefore the partner remained inactive after they newly acceded to the project. The impact on the project activities was minor since the remaining tasks did not require their contribution.

The Assessment task led to complex discussions until the end of the runtime since some partners didn't agree with the straight forward or simple approach finally taken. They would have preferred a more advanced statistical solution which foremost the coordinator found unsuitable for the particular case. Obviously national evaluations came to other results regarding the success of the different countries. Unfortunately there was no opportunity to investigate those potentially differing results until the end of the runtime. It is probable that the question of integration will be re-discussed under COSMOS2020 since in the final meeting also other aspects like the kind of work taken over by the different partners in Space projects were addressed and questioned. Maybe newer member states and associated countries tend to get less relevant tasks within projects.

During the transfer phase from FP7 to Horizon 2020 contact with the International Partner Countries (IPCs) became less frequent. The lack of a Space call and the busy times for the NCPs during the transfer had an according effect. During the second half of 2014 contact with Brazil became more concrete. Until then all efforts finally turned out not to be sustainable. After a visit of COM Copernicus unit staff in Brazil their interest seemed to have increased. A longer email exchange and plans for a joint meeting in Brazil resulted. Unfortunately it was not possible to arrange it still in 2014. For early 2015 the COSMOS2020 task team will try to gain input concerning IPCs for the coming Space work programme 2016 / 2017.

Changes in the consortium

Like under COSMOS many staff changes and even some partner changes took place. Within the second reporting period several amendment cases could be combined to one request case. The shift of one of the NCP Space jobs in Bulgaria forced partner ReSac to leave the project. As mentioned above the UK NCP restructuring led to a partner change from Beta technologies to Technology Strategy Board. They were later renamed InnovateUK. While the Belgian COSMOS partner DWTI - SIST preferred not to join the consortium from the beginning a change of leading staff led to a change of mind. It was possible to accept them as a new COSMOS+ partner. This was for mutual benefit since the partner working in Brussels showed always supportive, in particular in preparing meetings or events in Brussels. More changes just concerning staff within the second reporting period occurred in TR, ES, IT, UK (after the partner change), CH and IL.

List of project meetings

June 2013 **Bonn**, Germany (Management Meeting, review meeting, advanced training)

September 2013 **Brussels**, Belgium (Steering Committee meeting)

December 2013 **Brussels**, Belgium (Basic training, kick-off of Horizon 2020 Space)

June/July 2014 **Toulouse**, France (Information day incl. matchmaking, advanced training)

September 2014 **Rome**, Italy (Matchmaking, basic training, Management meeting)

November 2014 **Antwerp**, Belgium (Meeting with the COM/REA, working meetings)

Aside these more general, official meetings one additional working meeting and the countdown tour events aside the one in Brussels are worth to be listed here:

July 2013, **Brussels**, Belgium (Working meeting with COM on Countdown tour)

September 2013, **Vilnius**, Lithuania (Tour infoday)

October 2013, **Bremen**, Germany (Tour infoday)

October 2013, **Sofia**, Bulgaria (Tour infoday)

October 2013, **Warsaw**, Poland (Tour infoday)

November 2013, **Toulouse**, France (Tour infoday)

November 2013, **Rome**, Italy (Tour infoday)

January 2014, **Athens**, Greece (Tour infoday)

Lessons learned

For practical reasons, in cases when the availability of partners of related task teams was not ideal or because it would have been much more time consuming to involve more partners for all steps, some tasks were just taken over by a very small group or even just the coordinator. This was particularly the case when bigger events had to be organised. This was considered when the COSMOS2020 work breakdown structure was designed. While under COSMOS+ events still just comprised one task under COSMOS2020 it became a whole work package. It will involve many partners with clearly defined duties. If this works well all involved partners will learn a lot from each other about the organization of bigger events. This will surely also generally improve cooperation since close cooperation is a precondition for the success of this concept.

Like under COSMOS the coordinator observed that several partners didn't seem to really identify with the project. They stayed in rather passive roles and frequently had to be reminded about the idea and work plan of the project. This was obvious for newcomers but also other partners had to be reminded about the tasks and what has to be done. For this reason the COSMOS2020 kick-off will involve a moderator who will make sure that all participants will actively contribute to the discussions how to implement the work to be done. This should build the basis for a better identification of all partners and an improved cooperation. The frequent staff changes observed since COSMOS will of course undermine these efforts in some cases. The consortium will have to see if particular solutions can be found to optimize contribution and identification also from new staff.

On the other hand some partners were not in all cases happy with the coordinator who sometimes took relevant decisions lacking the involvement e. g. of the Steering Committee. This was also discussed during the final meeting and the coordinator accepted this criticism and promised to improve. The issue will be addressed within the kick-off meeting of COSMOS2020.

From the joint organization of events and the cooperation in context of International Partner Countries it again became obvious how much depends on good cooperation with and acceptance by the COM. It will thus remain an important point to ensure good contacts with the according staff at the COM and to do a really good job so that the good image of the NCP network can at least be kept.

Last but not least cooperation with the Research Executive Agency was excellent even though the project officer changed twice within the runtime of COSMOS+ (and three times under COSMOS). All involved staff sympathized with the project and its particular challenges. They showed open and flexible which was a precondition for its success. For COSMOS2020 it means that like with the COM a good job and good communication have to be ensured so that this very good cooperation can be kept.