



# ASTERICS - H2020 - 653477

## Exploitation Plan

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#### Abstract

As described in the project plan, ASTERICS wants to exploit its products and results to as wide a range of research fields and industry sectors as possible, by ensuring the early identification of both high-impact ASTERICS technologies, IPR foreground or patent restrictions, and appropriate (industrial) target sectors. The Exploitation Plan describes the rolling wave plan for the execution of this search. This document is the first version that will be elaborated on in the course of the project as more details and options are explored and identified. Therefore the plan will be continuously updated during the execution.

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## II. DELIVERY SLIP

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## III. DOCUMENT LOG

Issue	Date	Comment	Author/Partner
1	27-08-2015	itemised list of steps	R. van der Meer/ASTRON
2	08-09-2015	first draft	R. van der Meer/ASTRON
3	25-09-2015	corrected draft	G. Cimò/ASTRON
4	01-01-2015	final version	R. van der Meer/ASTRON

## IV. APPLICATON AREA

This document is a formal deliverable for the GA of the project, applicable to all members of the ASTERICS project, beneficiaries and third parties, as well as its collaborating projects.

## V. TERMINOLOGY

ASTERICS	Astronomy ESFRI & Research Infrastructure Cluster
ESFRI	European Strategy Forum on Research Infrastructures
ASTRON	The Netherlands Institute for Radio Astronomy
WP	Work Package

## VI. EXECUTIVE SUMMARY

An important part of the ASTERICS strategy will be to ensure the exploitation and dissemination of project results and products to as wide a range of research fields and industry sectors as possible. This document, hereinafter *plan*, describes the ambition, the boundaries, the means, resources, risks, to develop an exploitation strategy. The ASTERICS consortium is a collaboration of astronomy, astrophysics and astroparticle physics institutes, four ESFRI facilities and their pathfinders, and other linked projects. The scope of the exploitation plan is to ensure the early identification of both high-impact ASTERICS technologies, IPR foreground or patent restrictions, and appropriate (industrial) target sectors. Actions to ensure the long-term and sustainable exploitation of the project beyond its formal contract duration will be identified and executed.

Since this is the first step into such an unexplored area, the plan starts with brainstorming sessions to survey the knowledge within the current collaboration. Such brainstorming will be the basis for further exploration by means of targeted questionnaires for the whole collaboration. The results of the questionnaires will be used to establish successive steps. The plan will be evolving throughout the duration of the project. This approach requires a frequent scanning of the results and matching them with our ambition and intermediate goals.

This plan has overlap with the collaboration plan. Both plans are complete and can be studied and executed individually. The results of this plan will be published in the periodic report.

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## 1. Objectives

The scope of the exploitation plan is to ensure the early identification of both high-impact ASTERICS technologies, IPR foreground or patent restrictions, and appropriate (industrial) target sectors. ASTERICS wants to exploit its products and results to as wide a range of research fields and industry sectors as possible. Actions to ensure the long-term and sustainable exploitation of the project beyond its formal contract duration will be identified and executed.

## 2. Introduction

ASTERICS is a collaboration of 22 partners linked to four ESFRI facilities. The aim of ASTERICS is to find solutions for the Big Data challenges that these ESFRI facilities will face when they come online. ASTERICS will seek commonalities in data handling, data storage, etc. There might be many other communities and organisations that will face similar, or related, challenges. Through this exploitation plan, the partners in the ASTERICS project actively pursue the exploitation of project results and products to a wide range of research fields and industry sectors.

This plan has overlap with the collaboration plan. Both plans are complete and can be studied and executed individually. Some tasks will run in parallel or can be combined. Both plans will be managed from the same Work Package. Doubling of effort will be minimized. The results of this plan will be published in the periodic report. They will be used as input in the execution of both plans.

The exploitation plan is divided into two streams that run in parallel and will come together further in the project. The two streams are:

1. the exploration of the expected and realised ASTERICS results, and of the boundary conditions around the exploitation of these results.
2. the investigation of the environment for organisations that can profit from ASTERICS results, and of the way ASTERICS should identify, interest and attract these organisations.



## 2.1. Stream 1: exploration of (expected) ASTERICS results

To explore the expected, and realised, results of the ASTERICS project and to find the boundary conditions for their exploitation, two sequential rounds are needed in the stream:

1. At early stages of the project, one needs to identify:
  - a. high impact ASTERICS technologies
  - b. IPR foreground
  - c. patent restrictions
2. Once ASTERICS exploitable products and results have been established, one can start the identification of:
  - a. long-term and sustainable exploitation of the project beyond its formal contract duration.
  - b. actions to ensure the long-term and sustainable exploitation of the project beyond its formal contract duration.
  - c. definition of Science 2.0, applicable to ASTERICS, future users of the results and interested parties

The results of these will lead to new tasks and follow-up actions.

## 2.2. Stream 2: investigation of the environment

The investigation of the environment for organisations that can profit from the project's results and the way ASTERICS should identify, interest, and attract these organisations, requires the following steps:

1. Identification of:
  - a. appropriate (industrial) target sectors
  - b. ways of exploitation of data and results per sector
    - i. communalities in exploitation of data and results
    - ii. differences in exploitation of data and results
  - c. exploitation events (possibilities)
  - d. (appropriate) major conferences
  - e. (appropriate) corporate events
2. Creation of material to promote and explain the goals and the results of ASTERICS:
  - a. printed materials

- b. conceptual demos
- c. communication platforms

These can be of various types with various purposes:

- i. push / pull
  - news, info, publications / questions, search
  - storage / retrieval
- ii. targeted / wide
- iii. static (background info) / dynamic (news items)
- iv. (inter)active / passive
  - forum, game / archive, database

The process of information gathering and creation of the promotional material is described in the next sections.

### 3. Ambition

The ASTERICS collaboration strongly supports the EC view of a collaborative EU at all levels and disciplines, therefore sharing project products and results. Through this exploitation plan, the partners in the ASTERICS project actively pursue the exploitation of project results and products to as wide a range of research fields and industry sectors as possible.

The ambition at the start of the project is set to be a realistic one: an early success that can be extended further.

The plan is to have the promotional material ready within the first project year. The first events to promote usage of the ASTERICS results will be soon after the material is ready.

The ambition is to attract at least one new user in industry and one in a research field outside astro(particle)physics during every project year, with the intention to reach many more.

The ambition is also to ensure the long-term and be identified and executed. The actions for will be defined at a later moment in the project.

## 4. Means

### 4.1. Information gathering

The first step in both streams is the identification of the items listed in sections 0 and 2.2. For this purpose, information should be gathered to define a direction, to set boundaries, to make selections and to set priorities.

The information gathering at the beginning of the project will be a two-step process:

1. Brainstorming with small groups
2. Questionnaires for all project stakeholders
  - a. short term: targeted (email)
  - b. long term: open invitation (website, forum)

The information gathering will start with a brainstorming session with a small group of project participants by selecting participants that have extensive networks inside and outside the project. A single large brainstorming session could be split into several ones involving smaller groups, which can focus on a number of targeted subjects.

Based on the results of the brainstorming sessions, a questionnaire for all project stakeholders will be created. A targeted questionnaire will aim for quick reactions (via email). In parallel, we will set up a longer list of issues to be addressed through the website and the forum. If the return is too low, people will be actively interviewed.

Through the brainstorming sessions and the questionnaires, it will be possible to get a complete picture of the information needed.

### 4.2. Creating promotional material

Creating promotional material is sometimes seen as an easy task that can be done on the side-line. To reach the largest audience and to gain the most impact, the promotional material, has to be excellent, appealing, true, complete, condensed and, most of all, fitting the presenters and their audience. Therefore, the promotional material needs to be built with a solid basis under consultation and feedback from the ASTERICS partners at all levels.

To create promotional material that meets these criteria, one needs to:

1. identify and define appropriate content
2. identify and define/restrict appropriate target audience
3. identify and define media.

The identification and information gathering is done through brainstorming sessions and questionnaires (see section 4.1). After the landscape has been sketched and approved, the production process can start. This will consist of the following steps:

1. collect content (from experts)
2. design presentation
3. produce presentation
4. create copies
5. distribute presentation
6. collect feedback on presentation
7. improve presentation by repeating from item 4.

## 5. Communication

The events ASTERICS is visiting and organizing for the exploitation of project products and results, will be advertised on the ASTERICS website ([www.asterics2020.eu](http://www.asterics2020.eu)).

There will also be a page where organisations can propose to host events, or request co-location of events.

Every partner is requested to contribute to the dissemination and presentations will be published on the ASTERICS website as well. These presentations can include slide shows, posters, movies.

There will of course be links to the communication platform and forum mentioned in the collaboration plan

## 6. Management

To manage this task successfully, the plan is to:

1. include boundary conditions (goals, scopes at different times,...)  
The boundary conditions will be set to keep the focus. These boundary conditions will set limits on searches and efforts. With new information, these boundary conditions can be moved in a managed way. The WP1 management will monitor that they do not slip.
2. include deadlines



Deadlines are included both to meet the goals in a timely manner, but also to limit the time spent on every step, as metric to keep the boundary conditions within limits.

3. include resources

At the moment the amount of resources needed for this task is difficult to estimate and is not budgeted for explicitly in the project plan. During the elaboration of the plan, resources will be requested from all partners.

4. maintain a lessons learned register

As the collaboration plan is set up to learn from new partners and make it possible for parties outside ASTERICS to learn from the project results, the same principle should be used during the whole process. It is important that one uses the knowledge within the various partners about connections and contacts and creating new ones in every step of the plan. Maintaining a lessons learned register will facilitate spreading good practice.

5. identify risks

Risks should be monitored throughout the project. The initially identified risks are listed in the Risks section

## 7. Integration

The two streams described in section 2 run in parallel to find audiences and create material. After both streams have been completed, the results will be integrated and the promotional material used to show the ASTERICS results to the identified audiences. Together with the audiences, locations and occasions to meet with the audiences are identified. Events, linked to these occasions, will be organized. Examples of events are:

1. Exploitation events during major conferences
2. Exploitation events during corporate events
3. Engagement with potential industrial interests

If possible co-location with existing events will be pursued. These normally are focussed to specific target groups. If budget allows, ASTERICS could organise special topical events to meet prospective users of the results from various target groups at once.

Following the success of these events, it is important to start organizing the actions, identified in stream 1 (section 0), to ensure the long-term and sustainable exploitation of the project beyond its formal contract duration.

## 8. Risks

The risks identified within the definition of this plan are:

Risk	Mitigation plan
No useful results on the brainstorming sessions	Use a tight agenda for the brainstorming session and inviting committed persons.
Too many results from the brainstorming sessions, resulting in unfocused follow up	End the brainstorming session with a selection round to create a priority list.
No useful results on the first questionnaires	Create short clear questions that lead to short clear answers that can be completed with minimal effort.
Too many results from the questionnaires, resulting in unfocused follow up	Create focused questions, so the results should not be too diverse. Create a priority list and template that the answers should fit in.
People involved are not active enough, resulting in not enough progress.	The task leader should follow the process closely, setting many small targets with nearby deadlines. Create an easy reporting mechanism for easy follow-up.
People involved are too active in certain areas, resulting in missing focus in follow up areas. This way the contacted organisations get frustrated by lack of progress.	The task leader should follow the process closely, setting many small targets with nearby deadlines. Create an easy reporting mechanism for easy follow-up.
Promotional material does not cover all areas of ASTERICS.	Create a priority list that shows the areas that should be covered.
Promotional material does not connect to presenter, resulting in low quality presentation and less potential for exploitation of products and results.	Make sure presenters are ambassadors by requesting feedback on the promotional material before a presentation is given.
People do not use the lessons learned register, resulting in repeated errors, less positive results, with too much effort or too many resources.	The task leader should follow the process closely, setting many small targets with nearby deadlines, describing the place where information on optimal task execution can be found. Create an easy reporting mechanism for easy follow-up that requires filling the lessons learned register with new information every time.

## 9. Resources

The exploitation plan will be managed from WP1 under supervision of the project coordinator. The work for the exploitation plan will be spread over all WPs and all partners. The partner with the best contacts to the new sectors to be explored will be asked to take up the work, as this will result in minimal effort and large impact. At the moment the amount of resources needed for this task is difficult to estimate and is not budgeted for explicitly in the project plan. During the elaboration of the plan, resources will be requested from all partners.

## 10. Timeline

The timeline is based on getting tangible results in the first year of the project.

Timeline for information gathering:

deadline	activity
Oct 2015	brainstorming with small group on ALL 'identify' items (1a-c, 2a-c in section 0, 1a-e in section 2.2, 1 – 3 in section 4.2)
Oct 2015	define further steps (we expect a questionnaire to new links and existing partners, but other steps are not excluded)
Oct 2015	define resources for next steps
Oct – Dec 2015	activate or hire resources
Nov 2015	create questionnaire: 1st round (1a-c, in section 0, 1a-e in section 2.2))
1 Dec 2015	distribute questionnaire: 1st round
15 Dec 2015	deadline answers to questionnaire: 1st round
Jan 2016	analyse results of questionnaire: 1st round
15 Jan 2016	publish results of questionnaire: 1st round
end Jan 2016	create questionnaire: 2nd round (2a-c in section 0, 1 – 3 in section 4.2), based on results 1st round
1 Feb 2016	distribute questionnaire: 2nd round
15 Feb 2016	deadline answers to questionnaire: 2nd round
end Feb 2016	analyse results of questionnaire: 2nd round
1 Mar 2016	publish results of questionnaire
Apr 2016	solicit feedback and additions on published results

### Timeline on creation of promotional materials

<b>deadline</b>	<b>activity</b>
Oct 2015	solicit input to identify major conferences and corporate events
Nov 2015	create calendar of events
Nov 2015	collect content for promotional material
Dec 2015	design presentation
Dec 2015	design demos
Jan 2016	create presentation
Jan – Mar 2016	create demos
Feb 2016	copy and distribute presentation
Feb – Apr 2016	distribute demos
Mar – Sep 2016	collect feedback on presentation and demos
Oct 2016	improve presentation
Oct 2016	improve demos

### Longer term timeline

<b>period or deadline</b>	<b>activity</b>
2017	repeat all steps, identify and act on higher ambitions
1 April 2017	deliverable D1.3 Exploitation plan update
2018	repeat all steps, identify and act on higher ambitions

## 11. Results

The results of the execution of this plan will be published on the ASTERICS website and in the periodic report.