

# The science-policy link in practice: how to propose an Antarctic Specially Protected Area (ASPA)?

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**Basic idea:** Scientists go to the field, analyse data and literature, and get a good idea of the environmental values of the sites that would deserve additional protection

However,

- the process of ASPA proposal may look quite mysterious and complex
- scientists might feel that this process is something for other people (environmental managers, CEP delegation members...) but it is not their job
- or that this process would take too much time and not be valued for their career

Example of the process of ASPA designation in the Sør Rondane Mountains started by Belgium, still in the penultimate step

# Links between the Antarctic Science community and the Antarctic Treaty System where decisions are taken about ASPAs

K.A. Hughes et al.

Environmental Science and Policy 83 (2018) 86–95

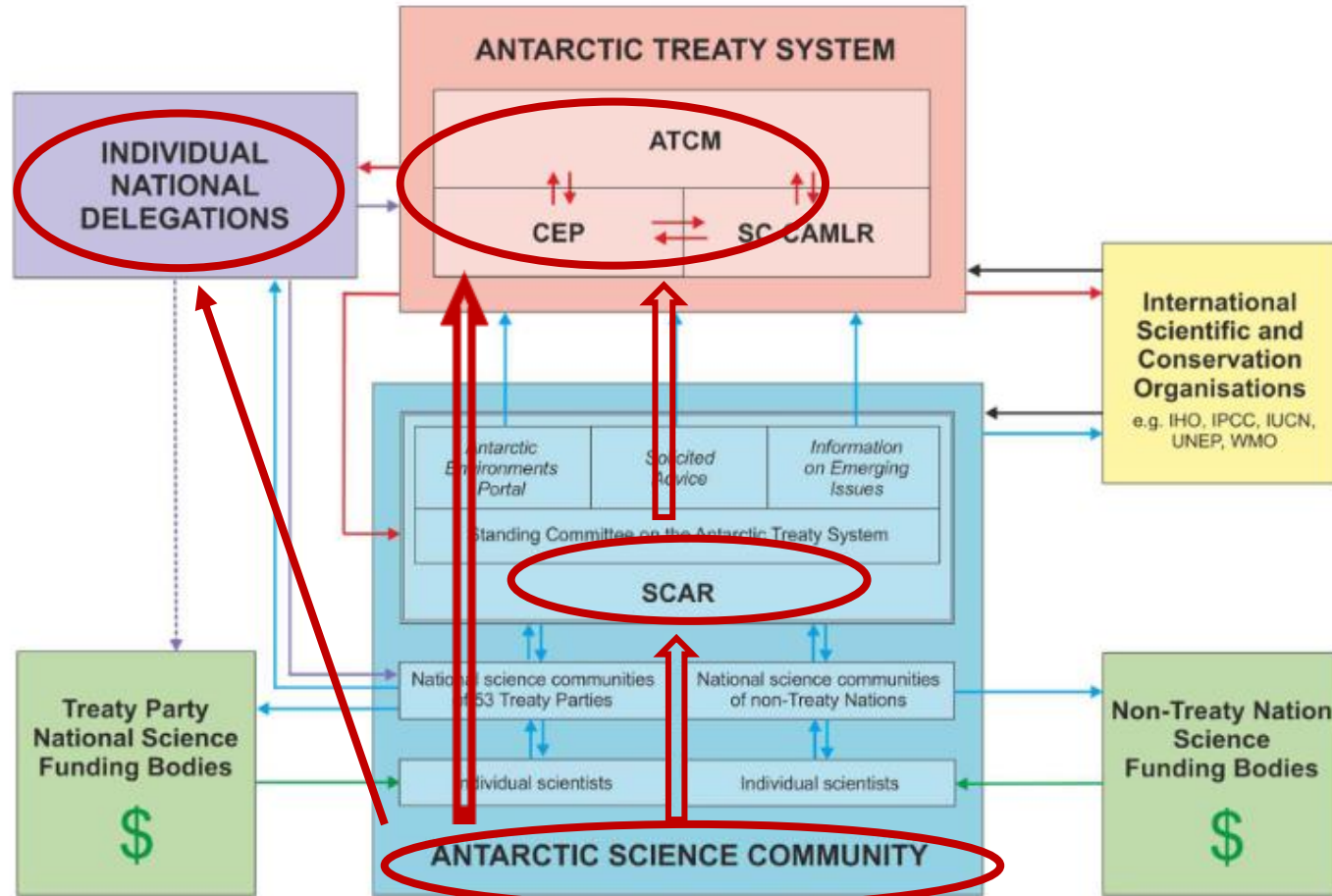
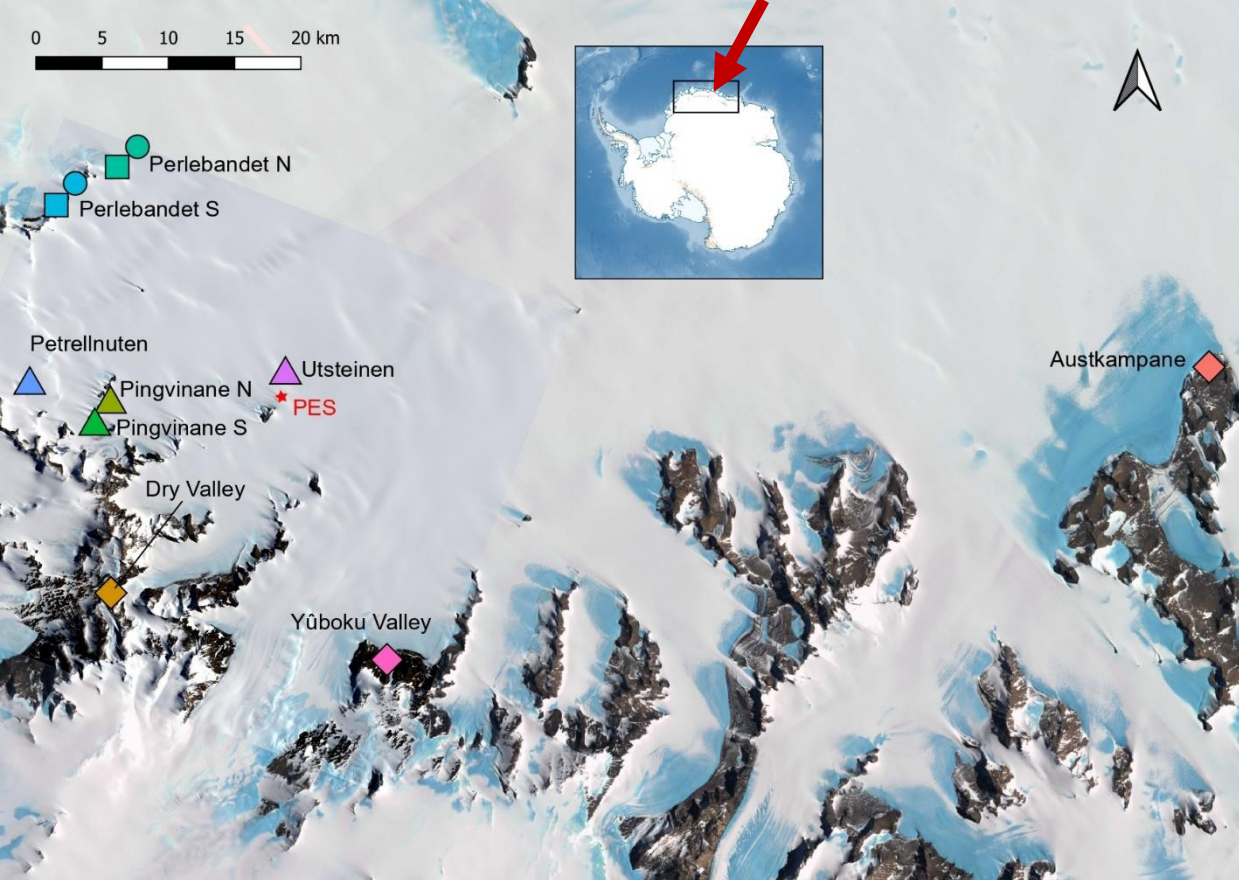


Fig. 2. Antarctic science-policy communication pathways. Arrow colours reflect the source of the communicated information. The dotted arrow highlights a particular opportunity for further improvements in communication between some individual national delegations to the ATCM and their respective national science funding bodies to consider more targeted funding of environmental science relevant to Antarctic policy needs.

## 2. Policy

## 1. Science





# 1. Science

Our site:

Dronning Maud Land, Sør Rondane Mountains

Region of the Belgian station, Princess Elisabeth (2009)







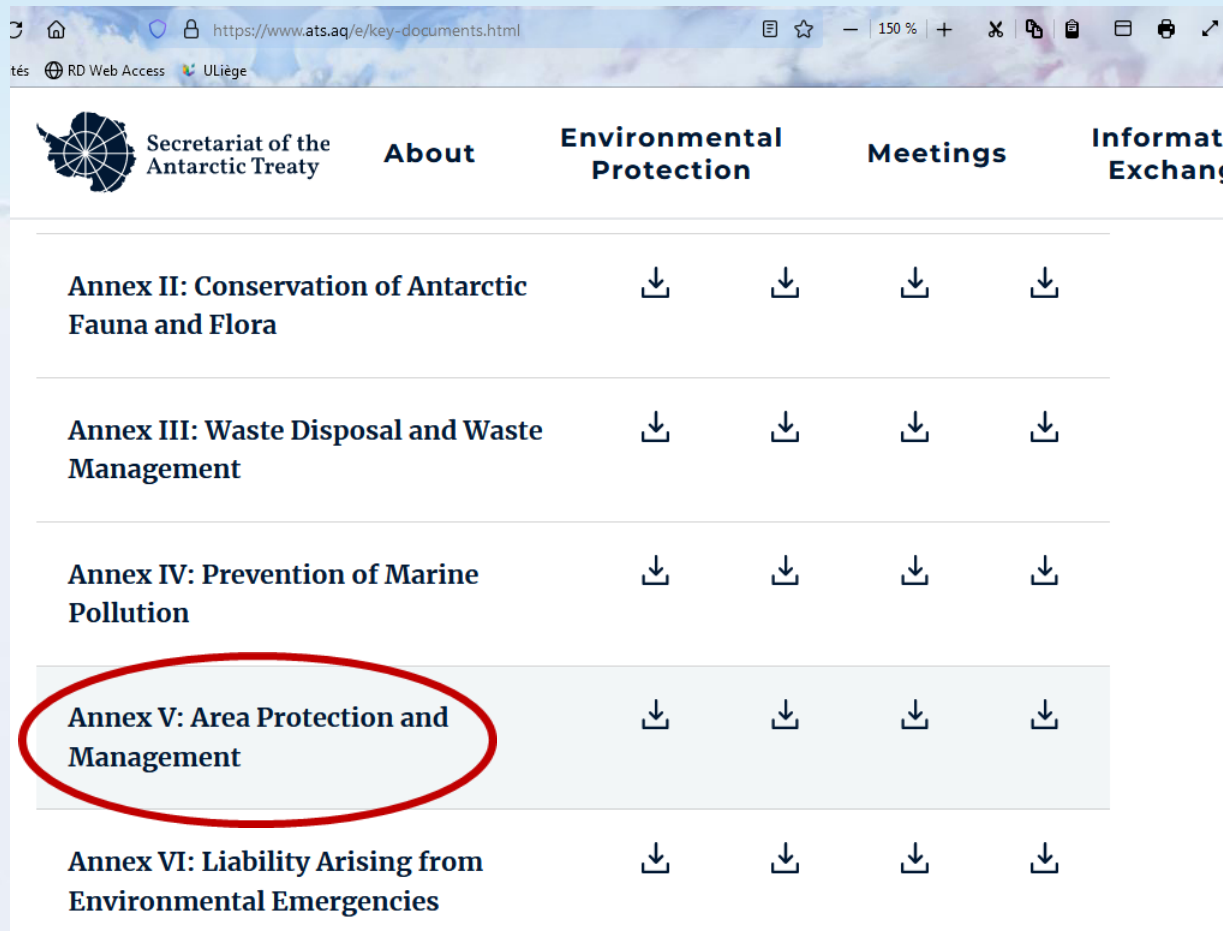
# 1. Science

Belgian Science Policy funded projects ANTAR-IMPACT, BELDIVA and MICROBIAN (2008-2020) : A very rich and unique terrestrial biodiversity on specific sites of the nunataks and ridges, including biofilms and Biological Soil Crusts.




## 2. Policy

Look at the documents to prepare the submission of a proposal on the **ATS website**:  
<https://www.ats.aq/e/key-documents.html>



The screenshot shows the ATS website with a navigation bar and a table of key documents. The table has five columns: 'Annex', 'Environmental Protection', 'Meetings', and 'Information Exchange'. The 'Annex V: Area Protection and Management' row is highlighted with a red circle.

 Secretariat of the Antarctic Treaty	About	Environmental Protection	Meetings	Information Exchange
Annex II: Conservation of Antarctic Fauna and Flora	↓	↓	↓	↓
Annex III: Waste Disposal and Waste Management	↓	↓	↓	↓
Annex IV: Prevention of Marine Pollution	↓	↓	↓	↓
Annex V: Area Protection and Management	↓	↓	↓	↓
Annex VI: Liability Arising from Environmental Emergencies	↓	↓	↓	↓

# Annex V : Area protection and Management

## ARTICLE 3 : *Antarctic Specially Protected Areas (ASPA)*

1. ...to protect "outstanding **environmental, scientific, historic, aesthetic or wilderness values**, any combination of those values, or ongoing or planned **scientific research**"
2. ... include in the series of ASPA:
  - (a) « areas kept **inviolate** from human interference so that future comparisons may be possible with localities that have been affected by human activities »
  - (b) representative of major **ecosystems**
  - (c) Important or unusual assemblages of **species**
  - (d) Type locality or only known habitat of any **species**
  - (e) areas of particular interest to ongoing or planned **scientific research**;
  - (f) examples of outstanding **geological, glaciological or geomorphological features**;
  - (g) areas of outstanding **aesthetic and wilderness value**;
  - (h) sites or monuments of recognised **historic value**; and ...



# 1. Outstanding values of the proposed area in light of the provisions of the Annex V

## 1. Biodiversity

2. Unique **representativeness** of mountainous ecosystems (very extreme) in ACBR6
3. Potential **refuges** for living organisms during the glaciation cycles in Antarctica
4. Scientific **experimental** value

## 2. Implications of an increase of activities in the area

Potential for negative impacts due to **visits** and **human disturbances**, mainly driven by the presence of **infrastructures** (Station, Blue Ice Runway for intercontinental flights at 60 kms) in the vicinity, and general increase in **inland tourism**.

⇒ Therefore, the involved scientists initiated the process of creating an ASPA in **collaboration with the relevant ministries** (Foreign Affairs, Environment and Science Policy).

# General process

(1) Prior assessment, to be presented at CEP



(1.b) Information Paper (IP) to answer the comments made



(2) Draft Management Plan, to be presented at CEP



**Where we are now !**



(3) Draft Management Plan discussed interessionally in the Subsidiary Group on Management Plans (→ CEP Discussion Forum where all Parties are invited)



(4) New version of Management Plan, based on SGMP advices, submitted to CEP




? (5) Final version of the Management Plan adopted by Measure XX (202X) at ATCM?



# (1) Prior assessment presented at CEP

## Guidelines and Procedures

<https://www.ats.aq/devAS/EP/GuidelinesAndProcedures?lang=e>

 Secretariat of the Antarctic Treaty	<a href="#">About</a>	<a href="#">Environmental Protection</a>	<a href="#">Meetings</a>	<a href="#">Information Exchange</a>	<a href="#">Data</a>
AREA PROTECTION AND MANAGEMENT (ANNEX V)					VIEW/DOWNLOAD
Revised Site Guidelines for Visitors Checklist (2021)					<a href="#">↓</a>
Summary of the work of the CEP on Marine Protected Areas 1998-2021					<a href="#">↓</a>
Flowchart to illustrate/summarize the process of evaluating and drawing conclusions with regard to assessing an area for potential ASMA designation (2019)					<a href="#">↓</a>
Guidelines for the assessment and management of Heritage in Antarctica (2018)					<a href="#">↓</a>
Guidance for assessing an area for a potential ASMA designation (2017)					<a href="#">↓</a>
Guidelines: A prior assessment process for the designation of ASPA and ASMAs (2017)					<a href="#">↓</a>
Checklist to assist in the inspection of ASPA and ASMA (2008)					<a href="#">↓</a>
Guidelines for handling of pre-1958 historic remains (2001)					<a href="#">↓</a>
Guidelines for Implementation of the Framework for Protected Areas (2000)					<a href="#">↓</a>

# (1) Prior assessment presented at CEP

## Appendix A: Antarctic Specially Protected Area prior assessment template<sup>1</sup>

Proponents should only complete those sections of the template that they consider relevant to the assessment they have completed.

1	Name of potential Antarctic Specially Protected Area (ASP):			
2	Proponent(s) of potential ASP:			
3	Location and approximate co-ordinates of potential ASP:			
4	Is the potential ASP within an existing Antarctic Specially Managed Area (ASMA)?			
5	Approximate size of potential ASP:			
6	Main physical components contained within the potential ASP (e.g. ice-free ground, lakes, ocean, ice shelf, permanent ice):			
7	Description of the initial rationale for area protection for the potential ASP:			
8	Indication of the values to be protected within the potential ASP, in accordance with Annex V Article 3(1):			
	Value	Primary value	Secondary value	Not applicable
	Environmental values			
	Scientific values			
	Historic values			
	Aesthetic values			
	Wilderness values			
	Combination of values			
	Ongoing or planned scientific activities			
9	Further description of values to be protected			
10	The following characteristics are contained within the potential ASP:			(Yes/No)
(a)	areas kept inviolate from human interference so that future comparisons may be possible with localities that have been affected by human activities			
(b)	representative examples of major terrestrial, including glacial and aquatic, ecosystems and marine ecosystems			
(c)	areas with important or unusual assemblages of species, including major colonies of breeding native birds or mammals			
(d)	the type locality or only known habitat of any species			
(e)	areas of particular interest to ongoing or planned scientific research			

Appendix A: Checklist of questions to define precisely what are the values to be protected

**First time** that the CEP hears about your proposal and needs to make an opinion about whether the site deserves to become an ASPA

To **communicate** to the other CEP members, as they do not know the area that you propose as ASPA.

Think of an annex with **pictures!**

# (1) Prior assessment presented at CEP



WP 42

ENG

Agenda Item: CEP 9e  
Presented by: Belgium  
Original: English  
Submitted: 07/04/2017

## Prior assessment of a proposed Antarctic Specially Protected Area (ASP) in the Sør Rondane Mountains

1	Name of proposed Antarctic Specially Protected Area (ASP): <i>Eastern Sør Rondane Mountains</i>			
2	Proponent(s) of proposed ASP: <i>BELGIUM</i>			
3	Location and approximate co-ordinates of proposed ASP: <i>Zone 71°50'-72°S 22°50'-23°50'E, including Tannegarden Ridge, Porselavuten Nunatak range of Pinzuvane Nunatak, Porselavuten range, and a part of the Teltet Nunatak. The proposed ASP includes several distinct ice-free sites, but the icy surfaces separating them may not be included (Fig. 1)</i>			
4	Is the proposed ASP within an existing Antarctic Specially Managed Area (ASMA)? <i>No</i>			
5	Approximate size of proposed ASP: <i>The ASP includes several separated ice-free areas, and the sum of their sizes is about ~20-21 km<sup>2</sup></i>			
6	Main physical components contained within the proposed ASP (e.g. ice-free ground, lakes, ocean, ice shelf, permanent ice): <i>Nunataks and rocky outcrops, mountain ranges and valleys</i>			
7	Description of the initial rationale for area protection for the proposed ASP: <i>In the ACBR 6 of Dronning Maud Land, only 2 Antarctic Specially Protected Areas (ASP) are designated, a coastal one in the Schirmacher Oasis (ASP 163: Dakshin Gangotri Glacier) and one for the nunatak Svarthamaren (ASP 142: Mühlig-Hofmannfiella). Altogether, these 2 ASP represent an area of less than 11 km<sup>2</sup>. These two ASP have different goals, being a retreating glacier or a very large nesting area for petrels, respectively. Therefore, none of them is representative of the pristine terrestrial mountainous habitats (above 1000 m altitude) even though this ecosystem is present throughout Dronning Maud Land in ACBR 6. An additional rationale is the establishment of the Belgian research station that has given access to these terrestrial biotopes to scientists since 2007. A first inventory of the biodiversity was started and indicated a surprisingly complex microbial and lichen diversity, but also the fact that different nunataks were hosts to genetically distinct populations of collembola, which underlines the need to protect these biological communities from homogenization by human activities.</i>			
8	Indication of the values to be protected within the proposed ASP, in accordance with Annex V Article 3(1):			
	Value	Primary value	Secondary value	Not applicable
	Environmental values	X		
	Scientific values	X		
	Historic values			X
	Aesthetic values		X	
	Wilderness values		X	
	Combination of values	X		
	Ongoing or planned scientific activities	X		
9	The following characteristics are contained within the proposed ASP:			(Yes/No)
(a)	areas kept inviolate from human interference so that future comparisons may be possible with localities that have been affected by human activities			Yes
(b)	representative examples of major terrestrial, including glacial and aquatic, ecosystems and marine ecosystems			Yes
(c)	areas with important or unusual assemblages of species, including major colonies of breeding native birds or mammals			Yes



## (1) Prior assessment presented at CEP

### Reaction of CEP to the presentation of the Prior Assessment (WP42) at CEP XX (Beijing, 2017)

“The Committee agreed that the **environmental and scientific values** found at the Sør Rondane Mountains site, including generally poorly studied organisms, merited further consideration for potential designation as an ASPA enhancing the representation of ASPAs in ACBR 6.

It was also noted that information provided to ATCM XL indicated a **potential increase in traffic in the area** in the future, which could underpin the need to protect pristine areas in this region.

The Committee welcomed Belgium’s intention to further consider the **development of a draft management plan** for the area, and noted that several Members had expressed an interest to contribute to the work. It encouraged other interested Members and Observers to work with Belgium in the intersessional period”

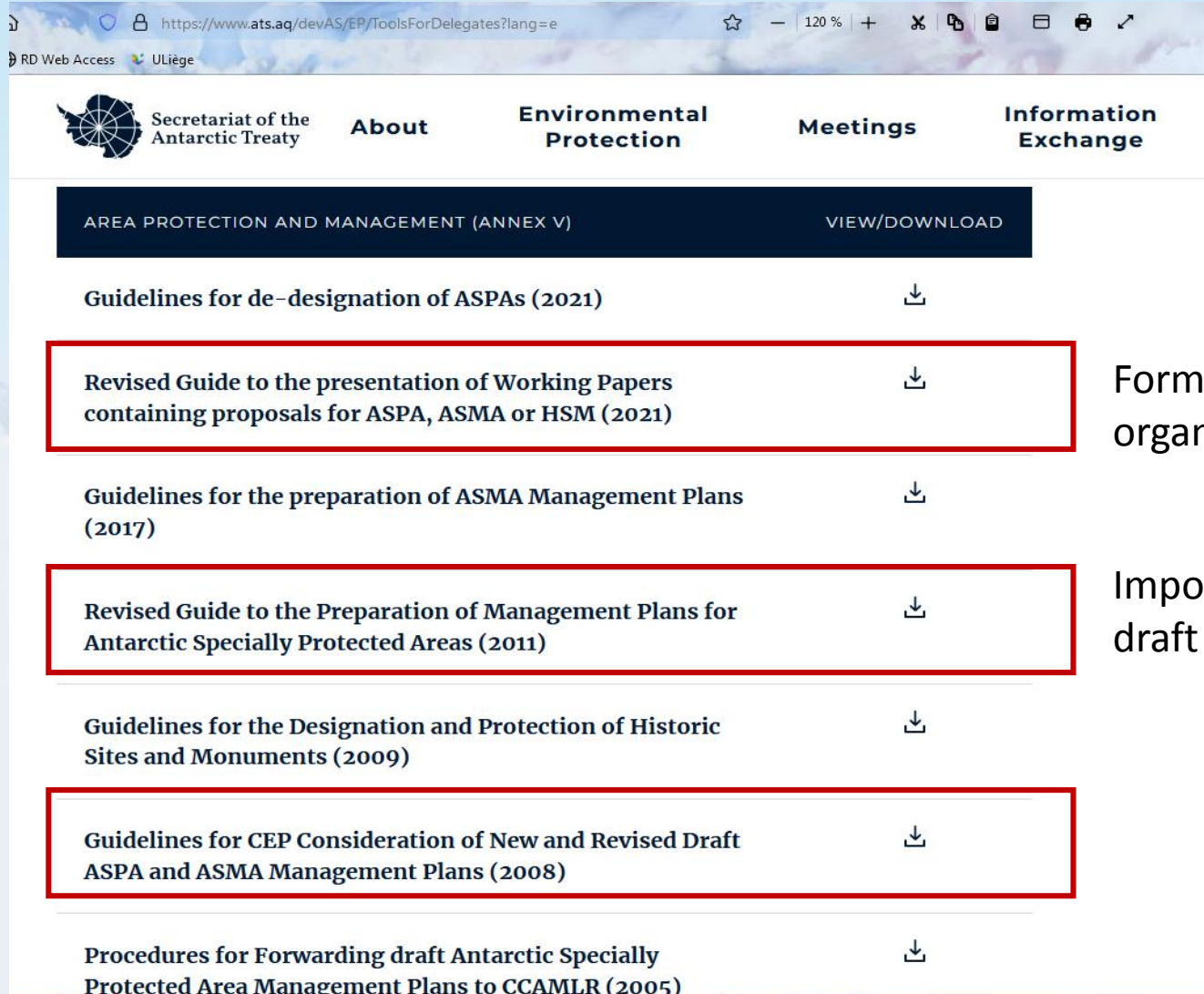
*Final report ATCM40*

+ reactions, questions, etc from other CEP members that we answered the next year with an Information Paper

## (2) Draft Management Plan presented at CEP

### Tools for delegates

<https://www.ats.aq/devAS/EP/ToolsForDelegates?lang=e>



The screenshot shows the website of the Secretariat of the Antarctic Treaty. The header includes the logo and navigation links: About, Environmental Protection, Meetings, and Information Exchange. A dark blue bar contains the text 'AREA PROTECTION AND MANAGEMENT (ANNEX V)' and a 'VIEW/DOWNLOAD' link. Below this, a list of documents is displayed, each with a download icon. Three documents are highlighted with red boxes: 'Revised Guide to the presentation of Working Papers containing proposals for ASPA, ASMA or HSM (2021)', 'Revised Guide to the Preparation of Management Plans for Antarctic Specially Protected Areas (2011)', and 'Guidelines for CEP Consideration of New and Revised Draft ASPA and ASMA Management Plans (2008)'.

Document Title	Action
Guidelines for de-designation of ASPAs (2021)	Download
Revised Guide to the presentation of Working Papers containing proposals for ASPA, ASMA or HSM (2021)	Download
Guidelines for the preparation of ASMA Management Plans (2017)	Download
Revised Guide to the Preparation of Management Plans for Antarctic Specially Protected Areas (2011)	Download
Guidelines for the Designation and Protection of Historic Sites and Monuments (2009)	Download
Guidelines for CEP Consideration of New and Revised Draft ASPA and ASMA Management Plans (2008)	Download
Procedures for Forwarding draft Antarctic Specially Protected Area Management Plans to CCAMLR (2005)	Download

Format of a **cover sheet** and organisation of the documents

Important, **all questions** to answer for the draft Management Plan

## (2) Draft Management Plan presented at CEP

### Revised guide : Checklist of items to define, what is permitted, etc

Format of Management Plans for ASPAs .....	3
Guidance for the content of Management Plans.....	4
Introduction .....	4
1. Description of values to be protected .....	5
2. Aims and objectives .....	5
3. Management activities.....	5
4. Period of designation.....	6
5. Maps .....	6
6. Description of the Area .....	6
6(i) Geographical co-ordinates, boundary markers and natural features.....	6
6(ii) Access to the area .....	7
6(iii) Location of structures within and adjacent to the Area .....	7
6(iv) Location of other protected areas in the vicinity .....	8
6(v) Special zones within the Area.....	8
7. Terms and conditions for entry permits.....	9
7(i) General permit conditions.....	9
7(ii) Access to, and movement within or over, the Area.....	9
7(iii) Activities which may be conducted in the Area .....	10
7(iv) Installation, modification, or removal of structures.....	10
7(v) Location of field camps .....	10
7(vi) Restrictions on materials and organisms which may be brought into the Area .....	10
7(vii) Taking of, or harmful interference with, native flora and fauna.....	11
7(viii) The collection or removal of materials not brought into the Area by the permit holder .....	11
7(ix) Disposal of waste .....	11
7(x) Measures that may be necessary to continue to meet the aims of the Management Plan.....	11
7(xi) Requirements for reports .....	12
Approval process for ASPA Management Plans.....	12
Preparing the draft Management Plan .....	12
Appendix 1. Guidance notes for producing maps for inclusion in Management Plans.....	2



# For drafting the Management Plan

For many practical questions, need to **discuss** with colleagues, operators, etc.

Pay attention to **misunderstandings**, as people may think that it is not possible anymore to enter into an ASPA, whereas it is still possible when a specific permit is given (but there are conditions set in the Management Plan)

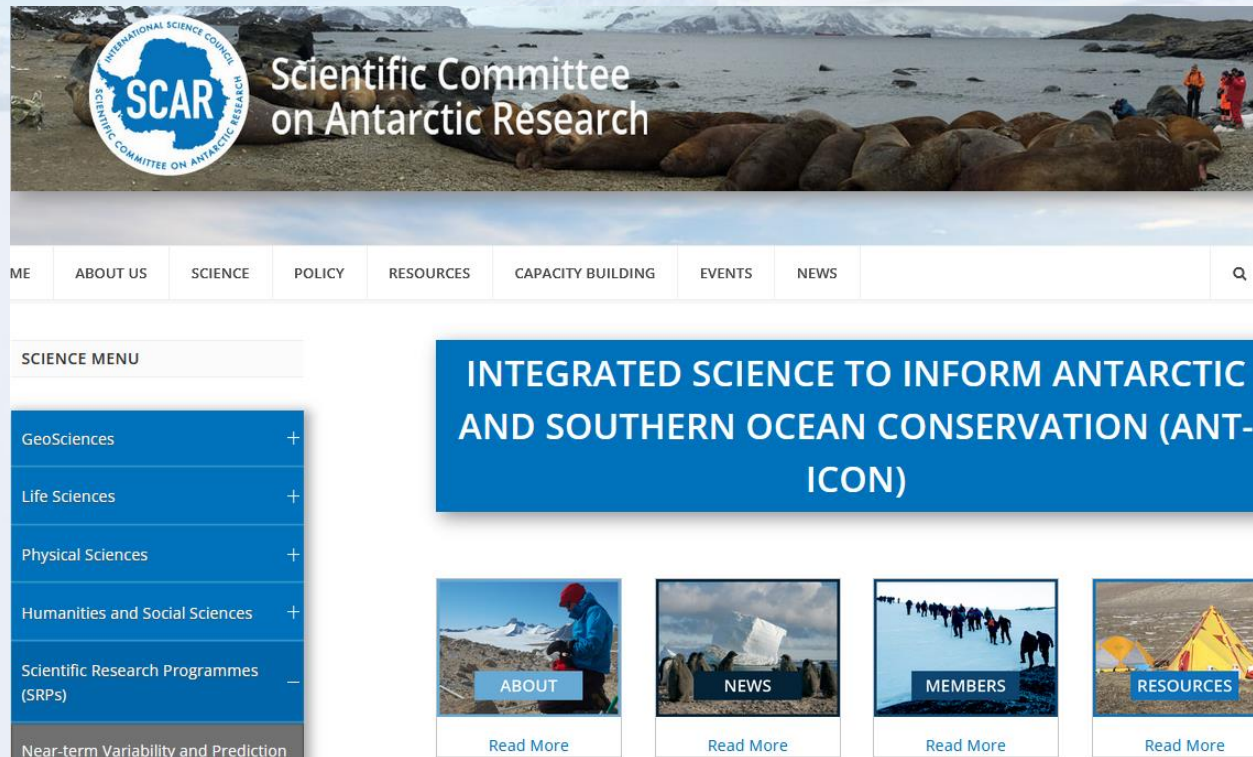
Pay attention to **fears** of others that their research or operations might be negatively impacted

Need **good maps**, to define boundaries and other internal characteristics like presence of structures, paths, etc

# In conclusion

If you think that your field site would deserve the **additional protection of an ASPA designation**, and you are interested to practice the link between Science and Policy, discuss with your colleagues, and contact your National SCAR or CEP representatives

Contact the ANT-ICON steering committee



Happy to share our experience :  
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Thanks to :

- François André, Stéphanie Langerock, Nils Vanstappen (Ministry of Health, Food chain safety and Environment, also CEP delegates)
- Koen Verheyen, Chris Vanden Bilcke, Christian de Lannoy (Ministry of Foreign Affairs)
- Maaïke Vancauwenberghe, Jean-François Mayence (Belgian Science Policy Office)
- Belgian and foreign colleagues involved in research and logistics in the Sør Rondane Mountains
- The 'unsung' heroes of Antarctica: microbial communities !



Thanks for your  
attention!

