



# Cost Estimates and Plans for the PEP Phase

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# Outline



- 1. Cost Estimates**
- 2. Plans for Further Development**

# 1. Cost Estimates



- **Budget for DVAC prototype and verification in the pre-construction phase**  
**€3.5 M**
- **Initial investment for phase I including verification**  
**€3 M**
- **Unit price of an antenna in phase I and phase II**

# 1. Cost Estimates



## ✓ Unit cost of an offset antenna in phase I and phase II

ITEM	UNIT PRICE (aluminum, k €) 250	UNIT PRICE (carbon fibre, k €) 250	UNIT PRICE (aluminum, k €) 3000	UNIT PRICE (carbon fibre, k €) 3000
Reflector	75	85	73	82
Pedestal	90	89	87	86
Servo System	33	33	31	31
Total	198	207	191	199

1) The exchange rate for the CNY and EUR is 9.5:1

2) The price is based on the price index in 2010, without any tax.

3) The feed subsystem is not included in these cost estimates.

# 1. Cost Estimates



- ✓ Unit price of an axi-symmetric antenna in phase I and phase II

ITEM	UNIT PRICE (aluminum, k €) 250	UNIT PRICE (carbon fibre, k €) 250	UNIT PRICE (aluminum, k €) 3000	UNIT PRICE (carbon fibre, k €) 3000
Reflector	65	75	63	72
Pedestal	108	107	103	102
Servo System	38	38	36	36
Total	211	220	202	210

- 1) The exchange rate for the CNY and EUR is 9.5:1
- 2) The price is based on the price index in 2010, without any tax.
- 3) The feed subsystem is not included in these cost estimates.

## 2. Plans for Further Development



### ➤ Schedule for the dish subsystem

	MILESTONE	TIME
<b>Pre-construction</b>		<b>2011.7-2015.12</b>
	Concept Design	-2011.7
	Primary Design and Feasibility Study	2011.8-2012.1
	Final Design of Prototype	2012.2-2012.4
	Finish Manufacture of Prototype	2012.5-2013.2
	Test Verification of Prototype	2013.3-2013.5
	Design Review and Design Change	2013.6-2013.8
	Finish Manufacture of the Second Prototype	2013.9-2014.1
	Test Verification of the Second Prototype	2014.2-2014.4
	Further Design Review and Design Change	2014.5-2014.8
	Mass Production Preparation	2014.9-2015.12
Phase I Construction	Dishes ~250	2016-2019
Phase II Construction	Dishes~3000	2019-2023

## 2. Plans for Further Development



### ➤ Phase I Construction

- ✓ Period: 2016-01~2016.12

Preparation for manufacture in the factory and on site.

- ✓ Period: 2017.01~2017.12

9 antennas/month, 1-100 units to be completely manufactured and installed.

- ✓ Period: 2018.01~2018.10

15 antennas/month, 101-250 units to be completely manufactured and installed.

- ✓ Period: 2018.11~2018.12

For contingency.

## 2. Plans for Further Development



### ➤ Phase II Construction

- ✓ Period: 2018-1~2018-12

Preparation for manufacture in the factory and on site.

- ✓ Period: 2019-1~2023-12

60 antennas/month, 3000 units to be completely manufactured and installed.





# Thank You

# END