

Welcome to the Future:

It might not be as bad as you think



**Your one stop guide
to the UK Space
Design Competition:**

- What the competition is
- What you have to do
- What you're competing for
- What you're given
- What you'll need to figure out
- How to divide your company
- Who does what?
- Skills that you will need
- How to win

What is the UKSDC?

Engineering industry simulation game

You work as a team to do a thing,
sometimes successfully

What You Have to Do

Design a Space Settlement

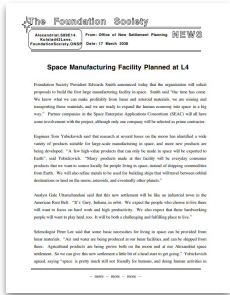
Make a Presentation

- You will get roughly **7.5 hours**
- Make a **35 slide** presentation, no more.
(Presentations must be handed in in either a .pdf, .ppt or .pptx format)
- You must present your presentation for **20 minutes** in front of the judges.
- You will then get asked questions about your presentation for **5 minutes** by the judges.

What You're Competing For



What You're Given Before the Competition



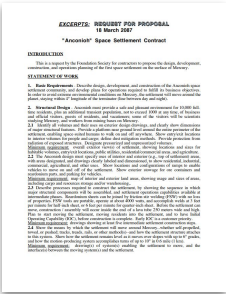
A Press Release: describes the intended location and purpose of the settlement. Will describe the general points which you are expected to fulfil with your design.



A Programme Booklet: contains details of the 'universe' in which you will work, details of each of your companies and details of all the subcontractors you can and should use. Includes a schedule of the day ahead.

What You're Given on the Day of the Competition

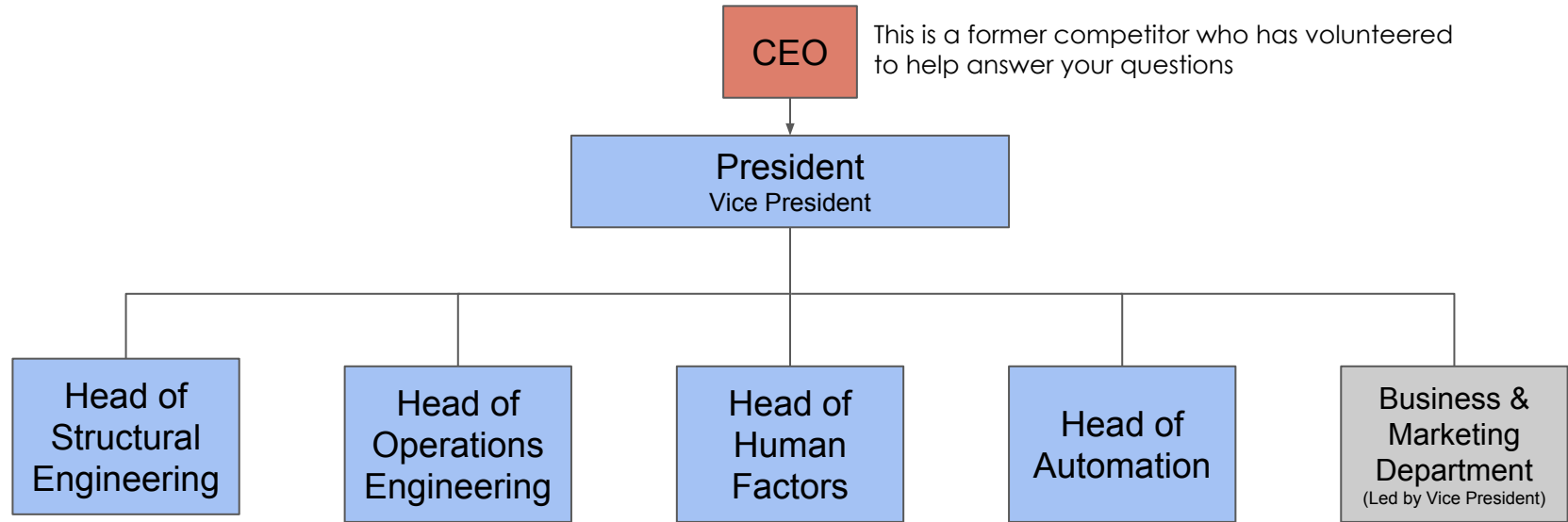
A Request for Proposal (RFP): In this you will find details of the requirements that your settlement must meet. Fulfilling all of the points on the RFP should be your ambition for the day; we will judge you on how well and how many RFP points you meet.



Pizza: In this you will find happiness. (Allergies catered for, let us know before they're ordered!)

How to Divide Your Company:

The RFP is divided into 4 (5) sections: divide your company similarly



What You'll Need to Figure Out:

- How to meet as many RFP points as possible in your settlement design
- What your settlement will cost (Don't include inflation)
- What technologies are reasonable to include in your design? (If in doubt, ask your CEO)
- How can you increase settlement efficiency?
- How can you get the work done in the time given?
- How can you explain your design to the judges in a clear and interesting way?

Who does what?

Structural:

- Conditions
- Concept
- Construction

Operations:

- Power
- Plumbing
- Processes

Human Factors:

- Homes
- Health
- Happiness

Automation:

- Drones
- Devices
- Data

Business & Marketing:

- Procedures
- Price
- Profits

Skills that you will need

- **Management** (If you have the best artists drawing the wrong things it doesn't matter how good they are)
- **Researching** (Most information you need you will have to find as you work)
- **Science Knowledge** (Applying fundamental ideas to a larger scale for the future)
- **Application of Engineering Principles** (Don't design a settlement that could not exist)
- **Drawing and Art Experience** (You will need to show your settlement off)
- **Design** (Make your presentation clear and appealing)
- **Finance and Estimation** (Make sure all your numbers and costs are reasonable and proportionate)
- **Presenting** (Convey your design effectively)

How to Win

- If you meet every single RFP point, you will win. (Note: this has never been achieved)
- Don't 'gold-plate' your design: if we wanted that feature, it would be on the RFP.
- Two rulesets apply: The Laws of Physics and Common Sense; defy neither.
- Read and apply all the material on offer.

- Consider the ramifications of all choices you make: does it make sense in the context?
- Construction is important; plan it from the start.
- No-one wants to live in a space gulag; don't design one.
- You must have a final cost, if not, how can we ever choose your proposal?
- You must include the costs of all subcontractors, your own costs, and shipping.

- A clean and logical presentation will benefit clear and thorough designs.
(i.e. Don't use dark backgrounds)
- If it doesn't have legible dimensions it's useless; make the judges' lives easy.