

# UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International Diploma Standard Level

## MARK SCHEME for the October 2004 question paper

### CAMBRIDGE INTERNATIONAL DIPLOMA IN ICT

5191 Core, maximum mark 100

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. They do not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

- CIE will not enter into discussion or correspondence in connection with these mark schemes.



October 2004

**CAMBRIDGE INTERNATIONAL DIPLOMA**  
**Standard Level**

MARK SCHEME

MAXIMUM MARK: 100

PAPER: 5191/A

ICT (Core)



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Check send to address: **design.h@ucles.org.uk**  
Check subject line **ICTCOREX**  
Check for attachment present **SCA4MANU.TXT**  
If candidate has attached file **SCA4POP.CSV** instead of SCA4MANU.TXT then allow this

<Candidate Name>

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Date top right of page  
## Must be in the header ##

<today's date>

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Landscape  
All margins 4 cm  
## Allow for paper feed inconsistencies with printers – (the line length must be between 21.5 and 22 cm) ##

## Proposed Manufacturing Plant

Heading inserted  
Centre aligned  
18 point, underscored  
Different font to body text

As you are already aware, Hothouse Design has been contracted to produce a location of industry study for the multi-national chemical company Quattichem. The information provided within the brief has identified an initial short-list of 52 countries. These countries have been listed by Quattichem as those which they feel may provide for the right sort of corporate investment, given their other plants and holdings around the world. Since the initial list was submitted the project manager has received a further three areas to be added to the list, these being Thailand, Trinidad and Tobago, and Uruguay.

The dry raw materials for the two processes involved are to be sourced from Thailand, Indonesia, South Africa and Switzerland. The final location must have easy access for bulk transport of these raw materials to the plant, and for the end product (which will be in bulk powder form) from the plant. The other major raw material will be heavy crude oil, which can be sourced anywhere globally but must be available in relatively large quantities (approximately 6000 barrels a day). Other locational factors:

- availability of water
- good transport links
- remote location
- 60000-hectare site

Bullet points  
Indented at least 3cm  
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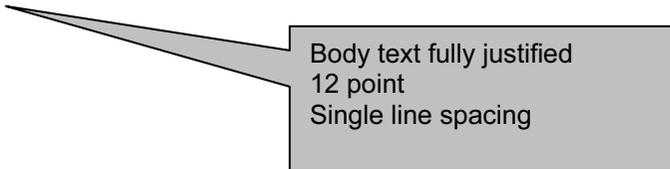
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The location must be remote from any centres of population. There must be a relatively flat area of land in excess of 60000 hectares which must not contain a habitat for any protected species of flora or fauna. Quattichem were explicit about this point at our initial meeting as they wish to try and develop an eco-friendly site, a strategy that they intend to use as part of their advertising campaigns for their product. There will be a requirement for a large quantity of natural water which will be used in the cooling processes. Approximately 20000 hectares of the site will be set aside to allow this water to cool back to the natural ambient temperature, before it is returned to the locality.

The cooling process could be used for the generation of electricity; this could provide an opportunity to create a working partnership with the government of the chosen location, to provide them with cheap electricity for the first 20 years of operation - Quattichem will need some form of incentive for the government concerned as the processes involved could be perceived as being dangerous. After the construction stage there would be few long term employment prospects as the plant will be almost fully automated. These are the estimated employment requirements:

The construction of the site will require only 12 professionals. The other workforce, (see the estimates above) could be provided from the communities in the region. This again would provide a good incentive for the country that is selected to host this facility. One factor which must be of prime importance is the selection of a region that is free from earth movements, earthquakes and any volcanic activity.

During the most recent meeting with the company, we had the distinct impression that a country in either America or the West Indies could be the favoured option of Quattichem's managing director, and with this in mind, it may be worth investigating



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**<Candidate Name>**

**<today's date>**

this are first. Here are the details of all the short-listed countries in that region with a population of under 3.5 million people:

Take these details and investigate the possible locations that could provide a solution for Quattichem. For each location we need to evaluate the physical Geography of the location, existing transportation links and the potential for new transportation links, proximity of population centres, climate, political structures and stability, as well as the other requirements mentioned above. Please identify in these reports your estimated costs for providing the necessary infrastructure to this location (not including the cost of building the plant). Please identify any potential problems with selecting this location, even if they have not been identified in any of the notes within this document or from the briefing meeting. This will probably be the most critical factor in your report.

Please note that some of our competitors have also been contracted to produce reports on the suitable locations for this manufacturing plant. The long-term benefits of selecting the most appropriate site and winning future contracts for the development of this site could well generate Hothouse Design a future income in excess of 23 million US dollars. Needless to say, confidentiality is of the utmost importance while you are working on this report.

Page orientation portrait

Heading 'High population countries' at the top  
Does not have to be in the header and any alignment is acceptable

# High population countries

Country	Region	Population	Density	Energy	Imports	Exports
Australia	Oceania	18.4	2	7.61	3342	2942
Belgium	Europe	10.2	335	6.86	14702	16078
Canada	America	30.2	3	11.21	5676	6491
Chile	America	14.7	20	1.45	1121	1130
Czech Rep.	Europe	10.5	136	4.97	2450	2099
France	Europe	58.8	107	5.15	4763	4941
Germany	Europe	82.3	236	5.48	5445	6227
Greece	Europe	10.6	82	3.22	2056	899
Hungary	Europe	10.2	110	3.27	1472	1217
Italy	Europe	57.8	196	3.95	3562	4038
Japan	Asia	125.9	334	4.98	2684	3540
Malaysia	Asia	20.9	64	2.29	3751	3563
Netherlands	Europe	15.9	469	7.22	11419	12680
Poland	Europe	38.8	127	3.51	753	593
Portugal	Europe	10.1	110	2.13	3261	2280
South Africa	Africa	42.3	35	2.73	718	653
South Korea	Asia	46.1	466	3.77	3013	2788
Spain	Europe	39.3	79	3.01	2890	2334
Taiwan	Asia	21.7	603	2.5	4868	5238
Thailand	Asia	60.8	119	1.07	1236	946
United Kingdom	Europe	58.6	243	5.33	4527	4130
United States	America	268	28	11.39	2929	2222

Sorted in ascending order on 'Country'

Search  
Population > 10

24 November 2002

Candidate's name

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Does not have to be at bottom of the page

# Asia - densely populated

Heading 'Asia – densely populated' at the top  
Does not have to be in the header  
and any alignment is acceptable

Only these 4 fields selected  
Can be any order or layout

Density	Country	Region	Energy
5246	Singapore	Asia	9.67
603	Taiwan	Asia	2.5
466	South Korea	Asia	3.77
334	Japan	Asia	4.98
119	Thailand	Asia	1.07
			4.398

Search  
Density > 100 AND Region = Asia

Check data entry of Thailand  
Must be 100% accurate

Calculated Field  
Average Energy calculated

Sorted in descending order on 'Density'

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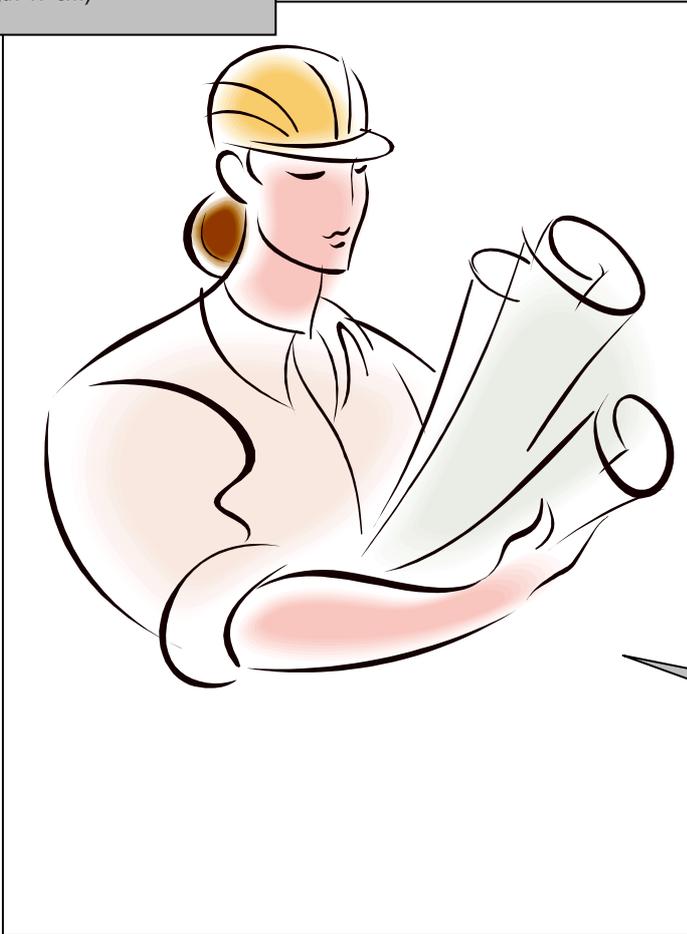
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Allow for paper feed  
inconsistencies with printers – (the  
line length 17 cm)

## Proposed Manufacturing Plant

Heading present  
Any alignment, font  
or point size, is acceptable



As you are already aware, Hothouse Design has been contracted to produce a location of industry study for the multi-national chemical company Quattichem. The information provided within the brief has identified an initial short-list of 52 countries. These countries have been listed by Quattichem as those which they feel may provide for the right sort of corporate investment, given their other plants and holdings around the world. Since the initial list was submitted the project manager received a further three areas

Image of any building inserted  
It may contain construction, planning, tools etc  
Placed top left of page  
Graphic area no more than 40% of printed page and no less than 15% of page

Orientation of graphic not important

**Text must wrap around all the image**

processes involved are to be sourced from Thailand, Indonesia, South Africa and Switzerland. The final location must have easy access for bulk transport of these raw materials to the plant, and for the end product (which will be in bulk powder form) from the plant. The other major raw material will be heavy crude oil, which can be sourced anywhere globally but must be available in relatively large quantities (approximately 6000 barrels a day). Other locational factors:

- availability of water
- good transport links
- remote location
- 60000-hectare site

The location must be remote from any centres of population. There must be a relatively flat area of land in excess of 60000 hectares which must not contain a habitat for any protected species of flora or fauna. Quattichem were explicit about this point at our initial meeting as they wish to try and develop an eco-friendly site, a strategy that they intend to use as part of the advertising campaigns for their product. There will be a requirement for a large quantity of natural water which will be used in

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<today's Date>

20000 hectares of the site will be set aside to allow this water to cool back to the natural ambient temperature, before it is returned to the locality.

The cooling process could be used for the generation of electricity; this could provide an opportunity to create a working partnership with the government of the chosen location, to provide them with cheap electricity for the first 20 years of operation - Quattichem will need some form of incentive for the government concerned as the processes involved could be perceived as being dangerous. After the construction stage there would be few long term employment prospects as the plant will be almost fully automated. These are the estimated employment requirements:

Phase	Employed	Number
Construction	Local	750
Construction	External	12
Operation	Local	30
Operation	External	32

Table inserted here  
100% accuracy in data entry needed  
Any alignment acceptable

... require only 12 professionals. The other (above) could be provided from the communities in the region. This again would provide a good incentive for the country that is selected to host this facility. One factor which must be of prime importance is the selection of a region that is free from earth movements, earthquakes and any volcanic activity.

During the most recent meeting with the company, we had the distinct impression that a country in either America or the West Indies could be the favoured option of Quattichem's managing director, and with this in mind it may be worth investigating this are first. Here are the details of countries in that region with a population of under 5 million people.

Database extract placed here  
Format of the extract is not important

Country	Region	Population	Density
Uruguay	America	3.3	19
Bahamas	West Indies	0.3	28
Barbados	West Indies	0.3	616
Jamaica	West Indies	2.6	240
Panama	America	2.7	37
Trinidad and Tobago	West Indies	1.3	235

Searching for  
'Region' America or West Indies  
AND 'Population' < 3.5

Check data entry of two records for  
Trinidad and Tobago and Uruguay  
Must be 100% accurate

Take these details and investigate the possible location. ... could provide a solution for Quattichem. For each location we need Geography of the location, existing transportation new transportation links, proximity of population centres, climate, political

Only these 4 fields selected  
## Can be arranged in any order or layout ##

**<Candidates Name>**

**<today's Date>**

structures and stability, as well as the other requirements mentioned above. Please identify in these reports your estimated costs for providing the necessary infrastructure to this location (not including the cost of building the plant). Please identify any potential problems with selecting this location, even if they have not been identified in any of the notes within this document or from the briefing meeting. This will probably be the most critical factor in your report.

Please note that some of our competitors have also been contracted to produce reports on the suitable locations for this manufacturing plant. The long-term benefits of selecting the most appropriate site and winning future contracts for the development of this site could well generate Hothouse Design a future income in excess of 23 million US dollars. Needless to say, confidentiality is of the utmost importance while you are working on this report.

Check for no widows, orphans or lists or tables which overlap two pages

October 2004

**CAMBRIDGE INTERNATIONAL DIPLOMA**

**Standard Level**

MARK SCHEME

MAXIMUM MARK: 100

PAPER: 5191/B

ICT (Core)

Printout of the second e-mail prepared and ready to send to autoresponder-

Check send to address: **design.h@ucles.org.uk**  
Check subject line **ICTCOREX**  
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If candidate has attached file **SCB4AFR.CSV** instead of SCB4MANU.TXT then allow this

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**09/03/05**

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All margins 3 cm  
Allow for paper feed inconsistencies with printers – (the line  
length must be between 22.5 and 23 cm)

## Quattichem – Phase 2

Heading - Centre aligned  
24 point, underscored  
Different font to body text

As you are already aware, Hothouse Design has been contracted to produce a location of industry study for the multi-national chemical company Quattichem. The initial information identified a short list of 52 countries located globally, but over the space of the last two weeks the company has decided to focus on a country within a specified region. The board of Quattichem have decided, for a variety of cultural, political and economic reasons (after viewing their other plants and holdings around the world) to commission us to investigate some of the countries within Africa as potential sites. They have provided a list of thirty nine countries that they felt were worth investigation for this project. Since the list was initially provided, they have also added Botswana, Gabon and Swaziland.

Some of the team undertaking this project may have been involved in the initial feasibility study for Quattichem. They have taken many of the points raised in that study and offered those back to Hothouse for further development. I would like to thank the initial team for the thoroughness of their work at that stage. The team's effort and enthusiasm undoubtedly led to Hothouse obtaining this contract and the exclusion of all but one competitor at this stage.

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The dry raw materials for the two processes involved are to be sourced from Thailand, Indonesia, South Africa and Switzerland. The final location must have easy access for bulk transport of these raw materials to the plant, and for the end product (which will be in bulk powder form) from the plant. The other major raw material will be heavy crude oil, which can be sourced anywhere globally but must be available in relatively large quantities (approximately 6000 barrels a day). Other location factors:

- economic factors
- political stability
- availability of water
- good transport links

Bullet points  
Indented at least 4cm  
#Accept if start of text indented by 4cm from margin

As in the initial study the same locational factors will be relevant. The location must be remote from any centres of population. It must be on a relatively flat area of land in excess of 60000 hectares which must not contain a habitat for any protected species of flora or fauna. Quattichem were explicit about this point at our initial meeting as they wish to try and develop an eco-friendly site, a strategy that they intend to use as part of the advertising campaigns for their product. There will be a requirement for a large quantity of natural water which will be used in the cooling processes. Approximately 20000 hectares of the site will be set aside to allow this water to cool back to the natural ambient temperature, before it is returned to the locality.

The team working on this project will be split into two. David will lead the overall development and with his colleagues, will collect and collate all the relevant information about all countries on the given list (which must include those mentioned above). Sofia's team will focus on those countries where annual Imports are greater than 100 AND less than 500 and with the Exports less than 50. The starting point for this team will be the following countries:

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12 point  
Single line spacing

One factor which is of prime importance is the selection of a region that is free from earth movements, earthquakes and any volcanic activity. This means that Sofia's team must investigate which of the countries noted has no record of earthquakes or volcanic activity, as well as checking where tectonic plate boundaries lie within the continent. As climate will not be a factor affecting the running of the plant, the only consideration of this should be during the construction phase. These geographical factors were an area of focus for the Quattichem board when they commented upon the initial feasibility studies. Please ensure that these are highlighted at an early stage of the report.

David's team must also investigate in depth the political structures and stability of each country on the shortlist. This task must be undertaken with great sensitivity. The assistance that developing a plant like this could have to the economy of the region and country involved must also be considered. As mentioned earlier, the benefits of a relatively cheap and plentiful source of electricity would assist the country concerned. Quattichem have also asked us to investigate other methods of assisting the indigenous population in terms of developing specific areas. In order to do this I would like an initial grid developed for every region of each potential country which summarises key employment factors like this:

The initial grids and first draft of the report must be completed by next Friday. All team members will meet for a briefing at 9 o'clock on the following Monday in the conference room to discuss the next phase of the development of this report.

Page orientation portrait

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Does not have to be in the header and any alignment is acceptable

## Low population

Country	Region	Population	Density	Energy	Imports	Exports
Botswana	Africa	1.5	3	0.01	1153	1302
Gabon	Africa	1.2	5	0.87	667	2055
Gambia	Africa	1.2	120	0.1	192	32
Guinea-Bissau	Africa	1.2	41	0.1	66	22
Namibia	Africa	1.7	2	0.01	916	881
Swaziland	Africa	1	55	0.01	1090	855

Sorted in ascending order on 'Country'

Search  
Population < 2

Check data entry of Botswana  
Gabon & Swaziland  
Must be 100% accurate

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Does not have to be at bottom of the page

<Candidate's name>

Heading 'Low density and high energy' at the top  
Does not have to be in the header, any alignment is acceptable

## Low density and high energy

Only these 4 fields selected  
Can be any order or layout

Density	Country	Region	Energy
12	Algeria	Africa	1.58
5	Gabon	Africa	0.87
3	Libya	Africa	3.34
			3.34

Search  
Density < 20 AND Energy > 0.5

Calculated Field  
Maximum Energy calculated

<Candidate's name>

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Sorted in descending order on 'Density'

A4 page size - Portrait  
All margins 2 cm  
Allow for paper feed  
inconsistencies with printers – (the  
line length 17 cm)

## Quattichem – Phase 2

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Any alignment, font  
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commission us to investigate some of the countries within Africa as potential sites. They have provided a list of thirty worth investigation for this project. Since they have also added Botswana, Gabon and Swazi

Image of any building inserted  
It may contain construction, planning, tools etc  
Placed top right of page  
Graphic area no more than 40% of printed page and no less than 15% of page  
Orientation of graphic not important  
**Text must wrap around all the image**

Some of the team undertaking this project may feasibility study for Quattichem. They have taken many of the points raised in that study and offered those back to Hothouse for further development. I would like to thank the initial team for the thoroughness of their work at that stage. The team's effort and enthusiasm undoubtedly led to Hothouse obtaining this contract and the exclusion of all but one competitor at this stage.

The dry raw materials for the two processes involved are to be sourced from Thailand, Indonesia, South Africa and Switzerland. The final location must have easy access for bulk transport of these raw materials to the plant, and for the end product (which will be in bulk powder form) from the plant. The other major raw material will be heavy crude oil, which can be sourced anywhere globally but must be available in relatively large quantities (approximately 6000 barrels a day). Other location factors:

- economic factors
- political stability
- availability of water
- good transport links

Body text fully justified  
10 point  
1.5 times line spacing

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Must be in the footer

As in the initial study the same locational factors will be relevant. The location must be remote from any centres of population. It must be on a relatively flat area of land in excess of 60000 hectares which must not contain a habitat for any protected species of flora or fauna. Quattichem were explicit about this point at our initial meeting as they wish to try and develop an eco-friendly site, a strategy that they intend to use as part of the advertising campaigns for their product. There will be a requirement for a large quantity of natural water which will be used in the cooling processes. Approximately 20000 hectares of the site will be set aside to allow this water to cool back to the natural ambient temperature, before it is returned to the locality.

The team working on this project will be split into two. David will lead the overall development and with his colleagues, will collect and collate all the relevant information about all countries on the given list (which must include those mentioned above). Sofia's team will focus on those countries where annual Imports are greater than 100 AND less than 500 and with the Exports less than 50. The starting point for this team will be

Database extract placed here  
Format of the extract is not important

Country	Density	Imports	Exports
Benin	52	125	34
Gambia	120	192	32

Searching for  
100 < Imports < 500  
AND Exports < 50

Only these 4 fields selected  
Can be arranged in any order or layout

One factor which is of prime importance is that is free from earth movements, earthquakes and ... means that Sofia's team must investigate which of the countries noted has no record of earthquakes or volcanic activity, as well as checking where tectonic plate boundaries lie within the continent. As climate will not be a factor affecting the running of the plant, the only consideration of this should be during the construction phase. These geographical factors were an area of focus for the Quattichem board when they commented upon the initial feasibility studies. Please ensure that these are highlighted at an early stage of the report.

David's team must also investigate in depth the political structures and stability of each country on the shortlist. This task must be undertaken with great sensitivity. The assistance that developing a plant like this could have to the economy of the region and country involved must also be considered. As mentioned earlier, the benefits of a relatively cheap and plentiful source of electricity would assist the country concerned. Quattichem have also asked us to investigate other methods of assisting the indigenous population in terms of developing specific areas. In order to do this I would like an initial grid developed for every region of each potential country which summarises key employment factors like this:

Activity	Region	Percentage
Industry	Cottage Industry	7%
Agriculture	Coffee, Maize	56%
Unemployed		34%
Education or Other		3%

The initial grids and first draft of the report must be completed by next Friday. All team members will meet for a briefing at 10 o'clock on the following Monday in the conference room to discuss the next steps of the development of this report.

Table inserted here  
100% accuracy in numeric data entry needed  
Any alignment acceptable

Check for no widows, orphans or lists or tables which overlap two pages

October 2004

**CAMBRIDGE INTERNATIONAL DIPLOMA**

**Standard Level**

MARK SCHEME

MAXIMUM MARK: 100

PAPER: 5191/C

ICT (Core)

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Check subject line **ICTCOREX**

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Must be in the header

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Allow for paper feed inconsistencies with printers – (the line length must be between 22.5 and 23 cm)

## Phase 3 for Quattichem

Heading - Centre aligned  
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Different font to body text

In recent days, Quattichem have decided that the scope of our contract relating to the location of their new manufacturing plant should be changed. The search location has been amended to include the shortlisted countries in Africa and several potential host countries in their Asia region. This means that the latest shortlist of thirty seven countries identified by Quattichem must be investigated as part of this contract. I have in the last 10 minutes received an e-mail which contains brief details of another three countries that they would like to be added to the existing list. These are Azerbaijan, Kazakhstan and Laos. A revised data file which will contain the initial details of all these countries will be collated and available for use by the end of today.

Please note that the following countries are the prime suppliers of the bulk dry materials used in the manufacturing processes:

- Thailand
- Indonesia
- South Africa
- Switzerland

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10 point  
1.5 line spacing

Bullet points  
Indented at least 2cm  
Accept if start of text indented by 2cm from margin

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Must be in the footer

**<Candidate Name>**

**<Today's Date>**

Most of these materials will be transported in bulk powder form, so it is essential that good transport links are established or can be established without prohibitive costs. The contract has been extended to include the requirement for approximate costs to be shown, particularly in relation to the enhancement of the transport network in the area as well as an overall budget for the design and construction of the site. Please add a 30% contingency cost to all projected budgets before they are submitted as part of the report.

Recent developments internationally which have banned the use of single hulled oil tankers in some regions of the world must be taken into account. The plant's requirement for heavy crude oil, with an approximate consumption of 6000 barrels a day, will mean that a port taking only the most modern supertankers must be on site or available locally, if the region selected does not have this type of oil locally produced.

Please ensure that the other primary location factors, that is political stability, availability of water and good transport links are also given high priority. Another factor is that a remote location is required, at least 12 kilometres away from any centres of population. We must ensure that we evaluate the physical geography of the location, existing transportation links and the potential for new transportation links, climate, political structures and stability, as well as the other requirements mentioned above. Please identify any potential problems with selecting this location, even if they have not been identified in any of the notes within this document or from the briefing meeting. This will probably be the most critical factor in your report. It must be on a relatively flat area of land in excess of 60000 hectares which must not contain a habitat for any protected species of flora or fauna. Approximately 20000 hectares of the site will be set aside to allow this water to cool back to the natural ambient temperature, before it is returned to the locality.

<Candidate Name>

<Today's Date>

The new contract also requires us to produce some draft marketing strategies using the environmental aspects. They believe that in a changing global economy, consumers are prepared to pay a little extra to ensure that natural resources are preserved and natural habitats are protected. As Quattichem use large quantities of oil and other resources, there would appear to be a conflict of interests here and they are keen to try and persuade the consumers of their wide range of products of their 'green' credentials.

In light of the changes to the contact, the team has been enlarged. Safraz has been seconded to the team for the next week and will lead the work on the environmental preservation. The existing teams working under David will continue to collect and collate all the relevant information about all countries on the latest list. Sofia's team will initially focus on those countries where annual Imports are greater than 10 AND less than 300 and with a population of less than 3,000,000. The starting point for this team will be the following countries:

Sofia's team will ensure that all potential sites within these countries have been investigated by Tuesday's briefing meeting. By this stage David's team should have all the geographical data on these countries collated and presented, especially those relating to earth movements, earthquakes and any volcanic activity. I appreciate that for some team members it will involve working in unfamiliar areas, but it is essential that we have several options that can be developed into in-depth studies prior to the final deadline on the 15th. New team allocations will be:

<Candidates Name>

<Today's Date>

Page orientation portrait

Heading 'Asia Region' at the top  
Does not have to be in the header and any alignment is acceptable

# Asia Region

Country	Region	Population	Density	Energy	Imports	Exports
Afghanistan	Asia	23	35	0.04	19	6
Azerbaijan	Asia	7.7	89	2.6	105	86
Cambodia	Asia	10.5	59	0.02	43	24
Iran	Asia	69.5	42	1.88	537	348
Iraq	Asia	22.5	51	1.76	278	383
Kazakhstan	Asia	17	6	5.93	40	70
Kyrgyzstan	Asia	4.7	24	0.76	71	76
Laos	Asia	5.2	23	0.04	40	20
Mongolia	Asia	2.5	2	1.55	158	208

Sorted in ascending order on 'Country'

Search Region = Asia

Check data entry of Azerbaijan  
Kazakhstan & Laos  
Must be 100% accurate

Name bottom right of report  
Does not have to be at bottom of the page

<Candidate's name>

Heading 'Low density and few imports' at the top  
Does not have to be in the header, any alignment is acceptable

# Low density and few imports

Only these 4 fields selected  
Can be any order or layout

## Density Country

8 Niger  
6 Kazakhstan  
5 Central African Republic

## Region

Africa  
Asia  
Africa

## Imports

37  
40  
54  
37

Search Density <10 AND Imports < 60

Calculated Field  
Minimum Imports calculated

<Candidate's name>

Name bottom left of report  
Does not have to be at bottom of the page

Sorted in descending order on 'Density'

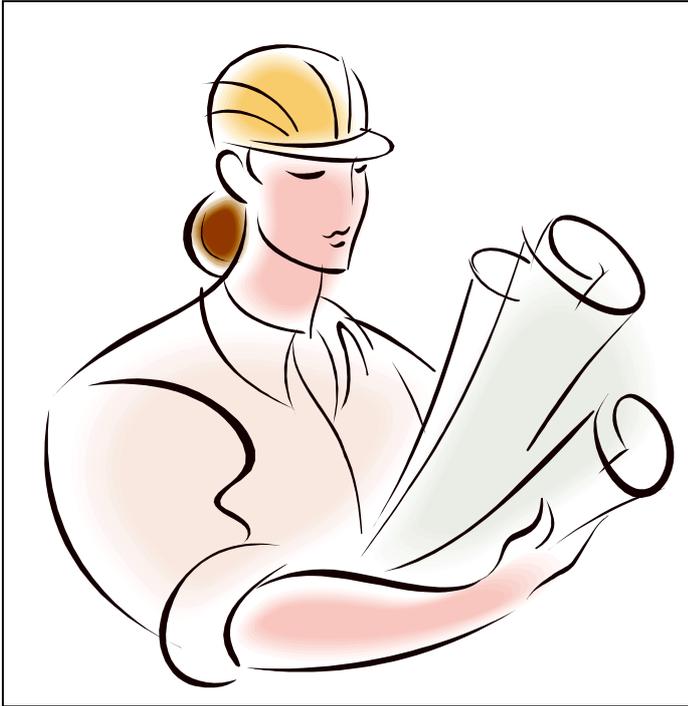
A4 page size - Portrait  
All margins 2 cm  
Allow for paper feed  
inconsistencies with printers – (the  
line length 17 cm)

ne>

<Today's Date>

## Phase 3 for Quattichem

Heading present  
Any alignment, font  
or point size, is acceptable



In recent days, Quattichem have decided that the scope of our contract relating to the location of their new manufacturing plant should be changed. The search location has been amended to include the shortlisted countries in Africa and several potential host countries in their 'Asia' region. This means that the latest shortlist of thirty seven countries identified by Quattichem must be included as part of

Image of any building inserted  
It may contain construction, planning, tools etc  
Placed top right of page  
Graphic area no more than 40% of printed page and no less than 15% of page  
Orientation of graphic not important

like to be added to the existing Kazakhstan and Laos. A revised data file which will contain the initial details of all these countries will be collated and available for use by the end of today.

Text must wrap around all the image

Please note that the following countries are the prime suppliers of the bulk dry materials used in the manufacturing processes:

- Thailand
- Indonesia
- South Africa
- Switzerland

Body text fully justified  
12 point  
single line spacing

Most of these materials will be transported in bulk powder form, so it is essential that good transport links are established or can be established without prohibitive costs. The contract has been extended to include the requirement for approximate costs to be shown, particularly in relation to the enhancement of the transport network in the area as well as an overall budget for the design and construction of the site. Please add a 30% contingency cost to all projected budgets before they are submitted as part of the report.

Recent developments internationally which have banned the use of single hulled oil tankers in some regions of the world must be taken into account. The plant's requirement for heavy crude oil, with an approximate consumption of 6000 barrels a day, will mean that a port taking only the most modern supertankers must be on

<Candidates Name>

<Today's Date>

site or available locally, if the region selected does not have this type of oil locally produced.

Please ensure that the other primary location factors, that is political stability, availability of water and good transport links are also given high priority. Another factor is that a remote location is required, at least 12 kilometres away from any centres of population. We must ensure that we evaluate the physical geography of the location, existing transportation links and the potential for new transportation links, climate, political structures and stability, as well as the other requirements mentioned above. Please identify any potential problems with selecting this location, even if they have not been identified in any of the notes within this document or from the briefing meeting. This will probably be the most critical factor in your report. It must be on a relatively flat area of land in excess of 60000 hectares which must not contain a habitat for any protected species of flora or fauna. Approximately 20000 hectares of the site will be set aside to allow this water to cool back to the natural ambient temperature, before it is returned to the locality.

The new contract also requires us to produce some draft marketing strategies using the environmental aspects. They believe that in a changing global economy, consumers have are prepared to pay a little extra to ensure that natural resources are preserved and natural habitats are protected. As Quattichem use large quantities of oil and other resources, there would appear to be a conflict of interests here and they are keen to try and persuade the consumers of their wide range of products of their 'green' credentials.

In light of the changes to the contact, the team has been enlarged. Safraz has been seconded to the team for the next week and will lead the work on the environmental preservation. The existing teams working under David will continue to collect and collate all the relevant information about all countries on the latest list. Sofia's team will initially focus on those countries where annual Imports are greater than 10 AND less than 300 and with a population of less than 3,000,000. The starting point for this team will be the following countries:

Country	Region	Population	Imports
Mongolia	Asia	2.5	158
Congo	Africa	2.7	259
Guinea-Bissau	Africa	1.2	66

Database extract placed here  
Format of the extract is not important

Searching for  
10 < Imports < 300  
AND Population < 3

Only these 4 fields selected  
Can be arranged in any order or layout

Sofia's team will ensure that all potential countries have been investigated by Tuesday's briefing meeting. By this stage David's team should have on these countries collated and pre relating to earth movements, earthquake and any volcanic

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Does not have to be in the footer

**<Candidates Name>**

**<Today's Date>**

activity. I appreciate that for some team members it will involve working in unfamiliar areas, but it is essential that we have several options that can be developed into in-depth studies prior to the final deadline on the 15th. New team allocations will be:

David	Sofia	Safraz
Anne	Akiko	Kelvin
Cammilla	William	Jamal
Li	Jo	
Michelle	Gunther	

Table inserted here  
100% accuracy in data entry needed  
Any alignment acceptable

Check for no widows, orphans or lists or tables which overlap two pages