

Benchmarking Study on Iceland as a Location for Data Centre Activity

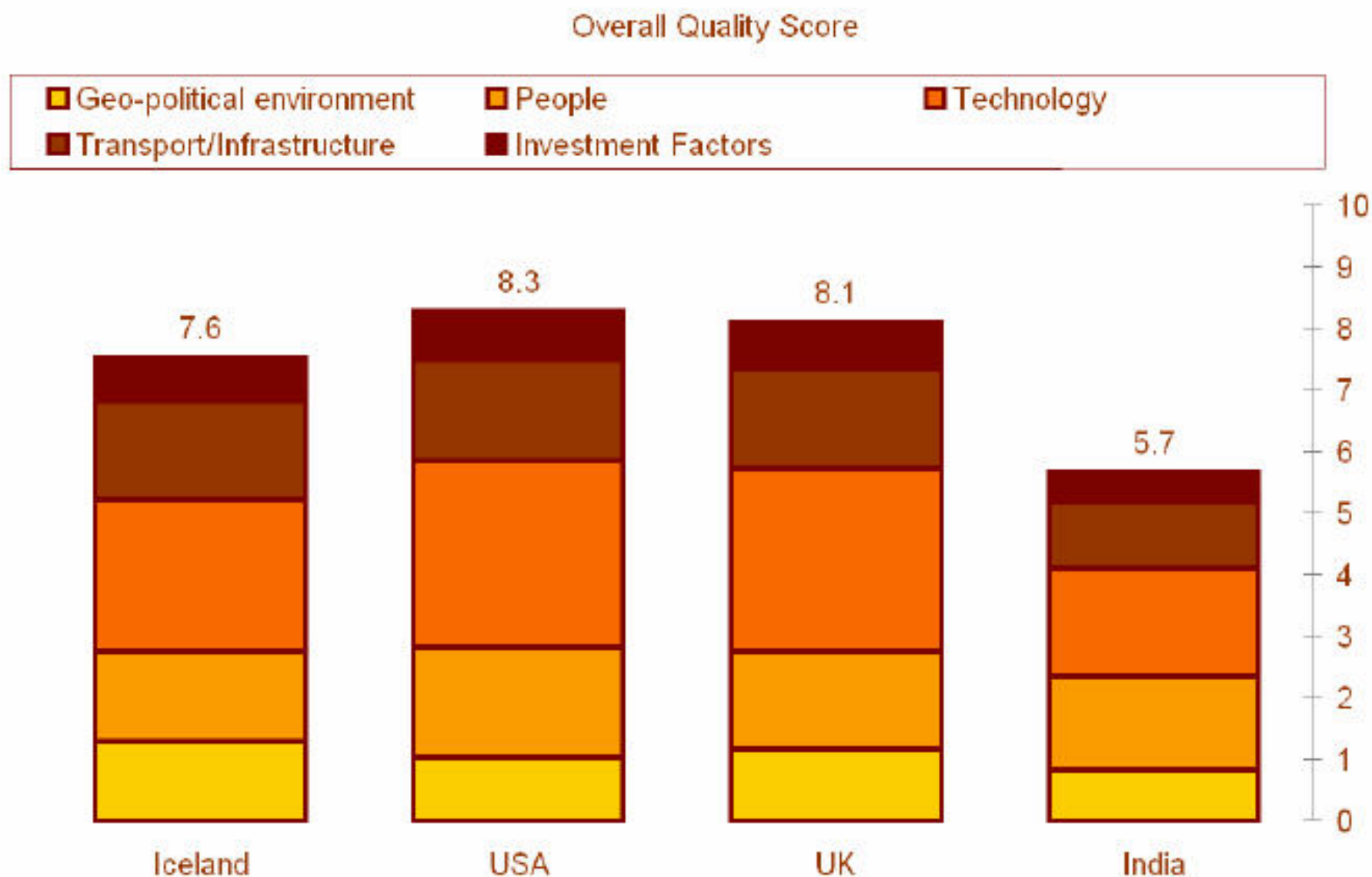
Invest in Iceland Agency

March 2007
Strictly Private & Confidential

A green window to the world



Qualitative criteria for the benchmark

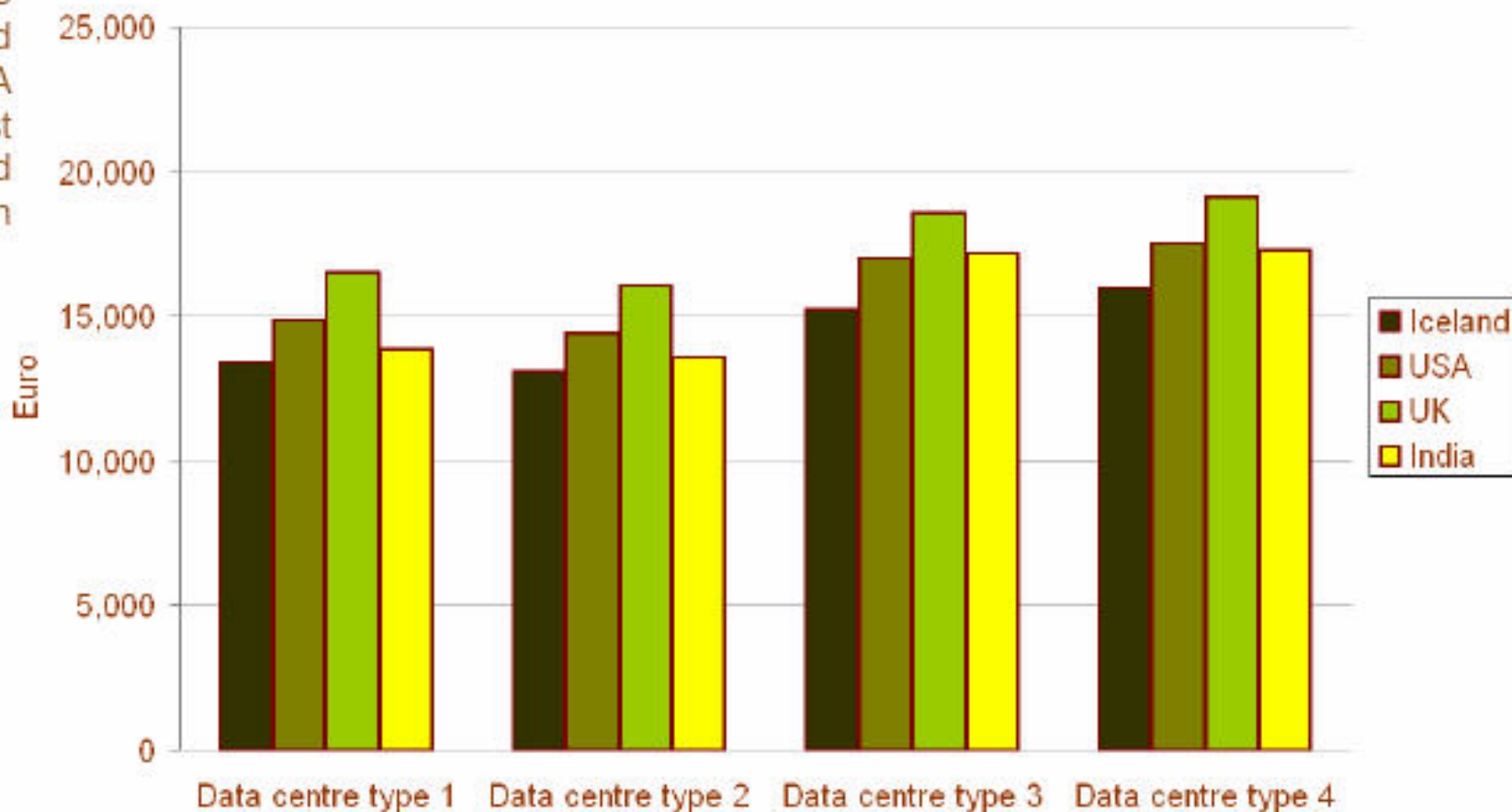


Cost components for the benchmark

The combination of the 4 detailed cost components results in a favourable position for Iceland, especially thanks to the power and rental cost.

Total annual cost of data centre type per m²

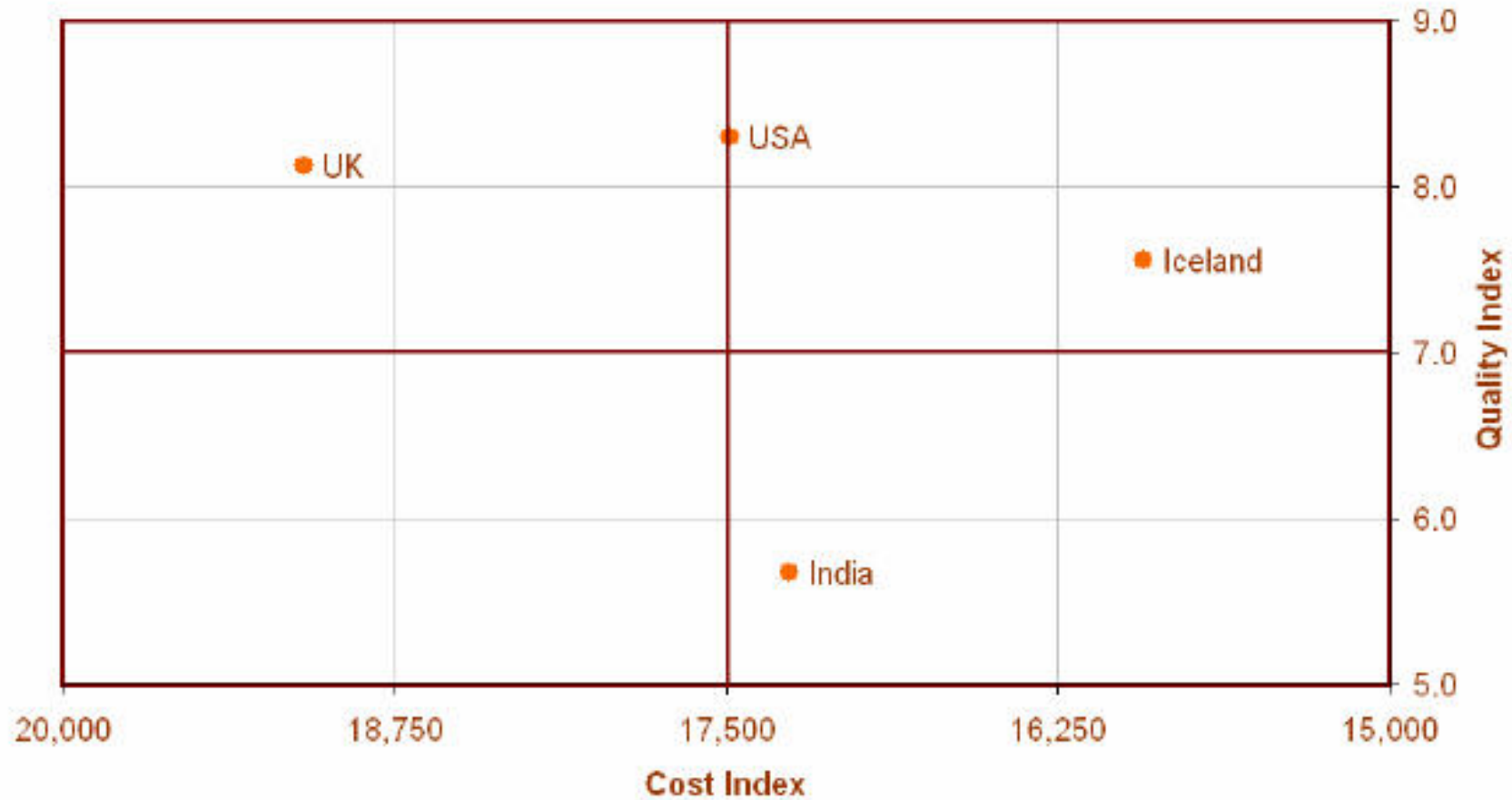
The cost difference between Iceland and a UK or USA location is biggest in scenarios 1 and 2 and smallest in scenario 4



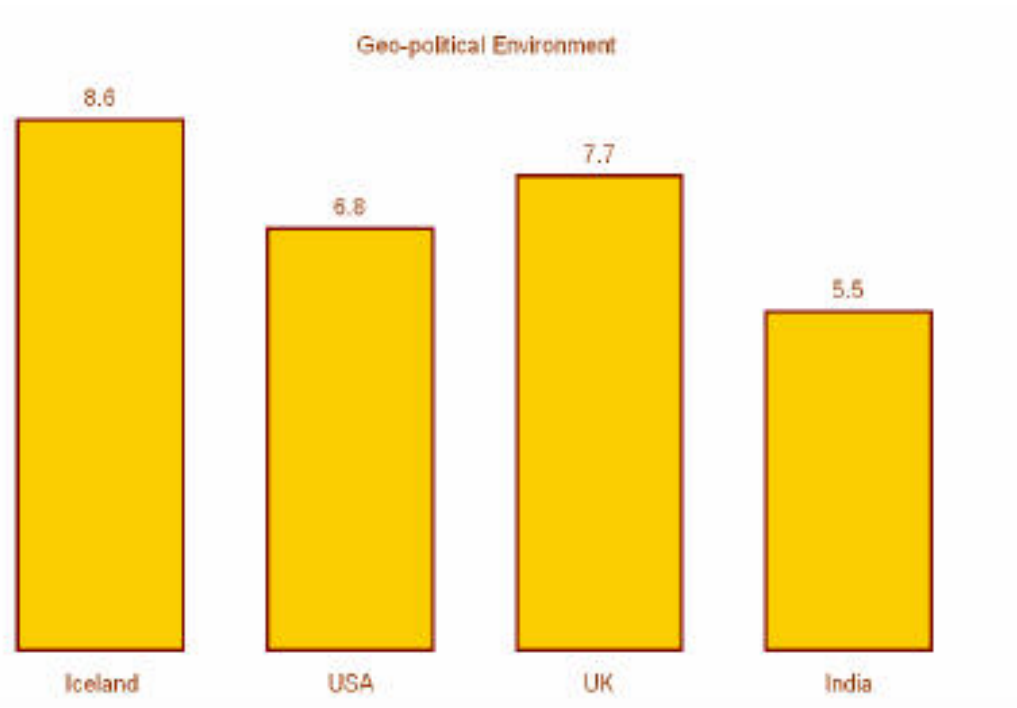
Cost components for the benchmark

The combination of the quality scores of the 4 locations and the most conservative input from scenario 4 allow for a cost – quality comparison:

Cost - Quality Position



Qualitative criteria for the benchmark

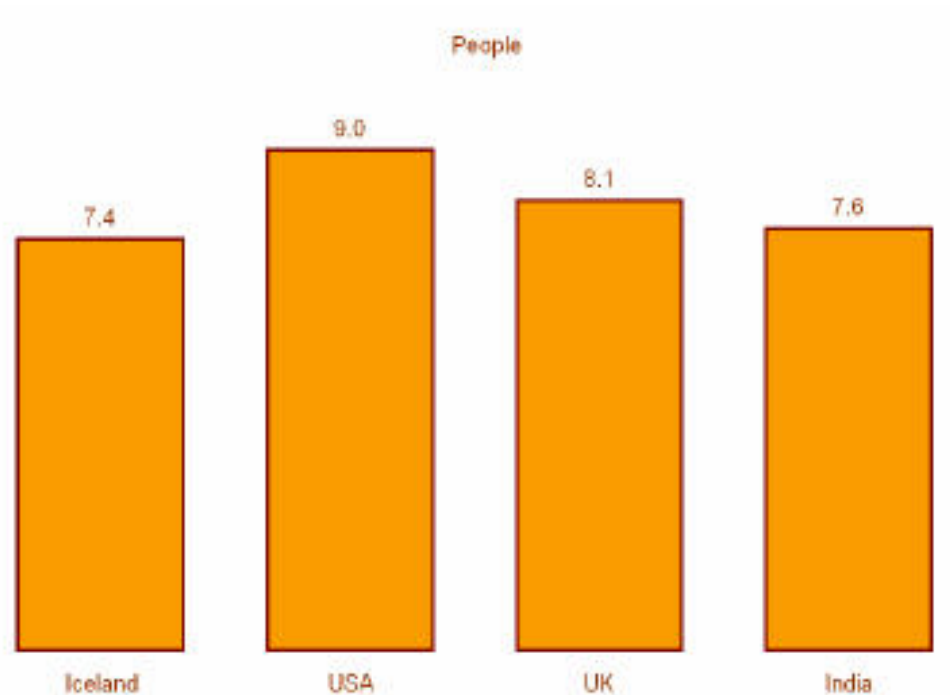


Seen the relatively high attributed weights, especially the attractive situation in terms of corporate taxation, natural disaster risk, and environmental awareness are to be noted.

Based on the selected location factors in this category, **Iceland scores best** when compared to the peer group.

Except for natural disaster risk, where the UK scores better, the situation in Iceland result in better or equally good scores on each of the other factors.

Qualitative criteria for the benchmark



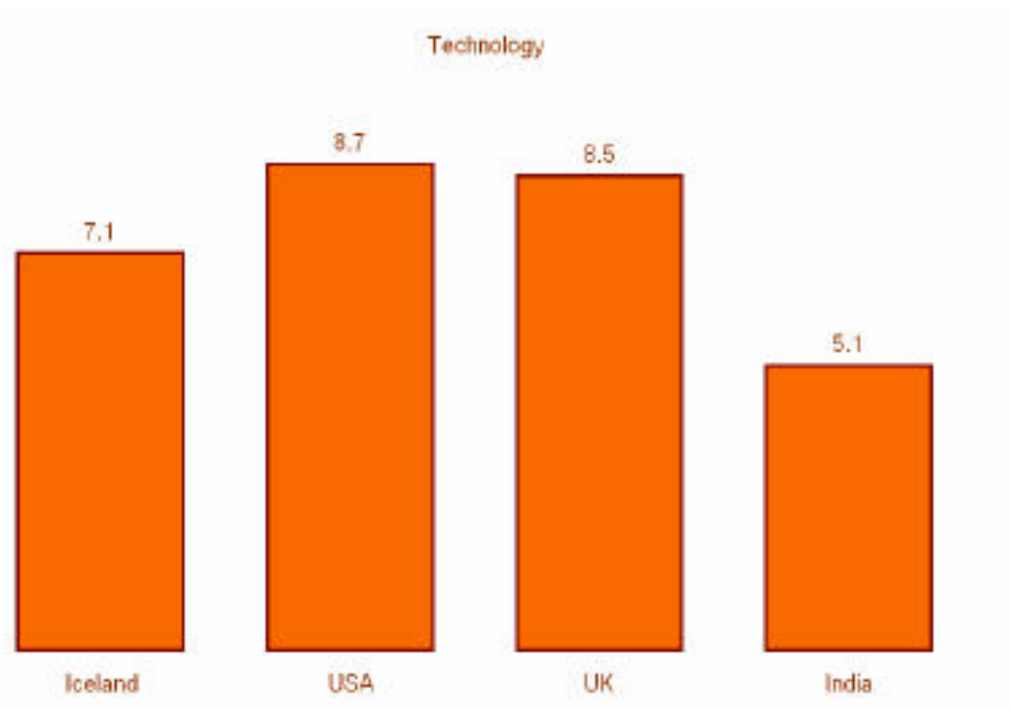
This number on general employment being low to any standard in the comparison, the free availability in the labour market is moreover quoted to be close to non-existing.

The overall good scores for Iceland on the other location factors in the category is apparent. In terms of competitive position, the country however does not benefit from this performance as both the UK and the USA provide for an equally good business environment in this respect.

The **low score** for Iceland in terms of **general availability of IT staff** is the single factor to explain the relative position in the People category.

The total number of persons employed in the ICT industry in Iceland is 6,145 based on Statistics Iceland.

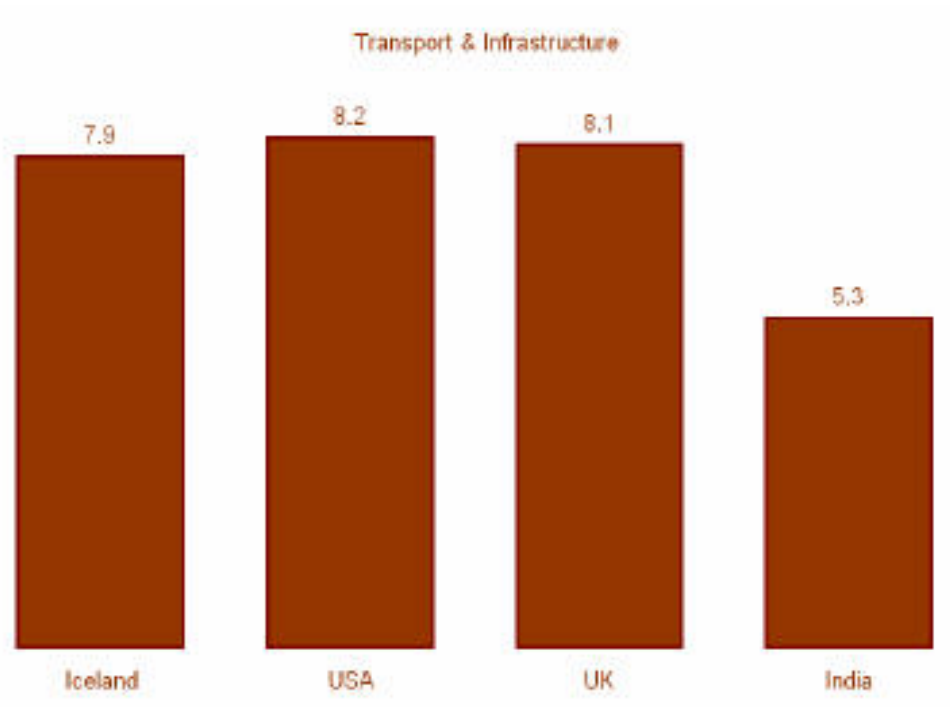
Qualitative criteria for the benchmark



The limited number of international links was identified to be the limiting factor for good performance of Iceland in the international competitive game for data centre operations. The new Farice cable will clearly take away stress in this respect. Yet in the overall benchmark to the UK and the USA, the connectivity of Iceland remains fragile.

The **overall performance** of Iceland with respect to the Technology location factor is **good**, though when compared to the USA and the UK, the country's **offer is less compelling for** mobile investment projects dependent upon **international telecommunication services**.

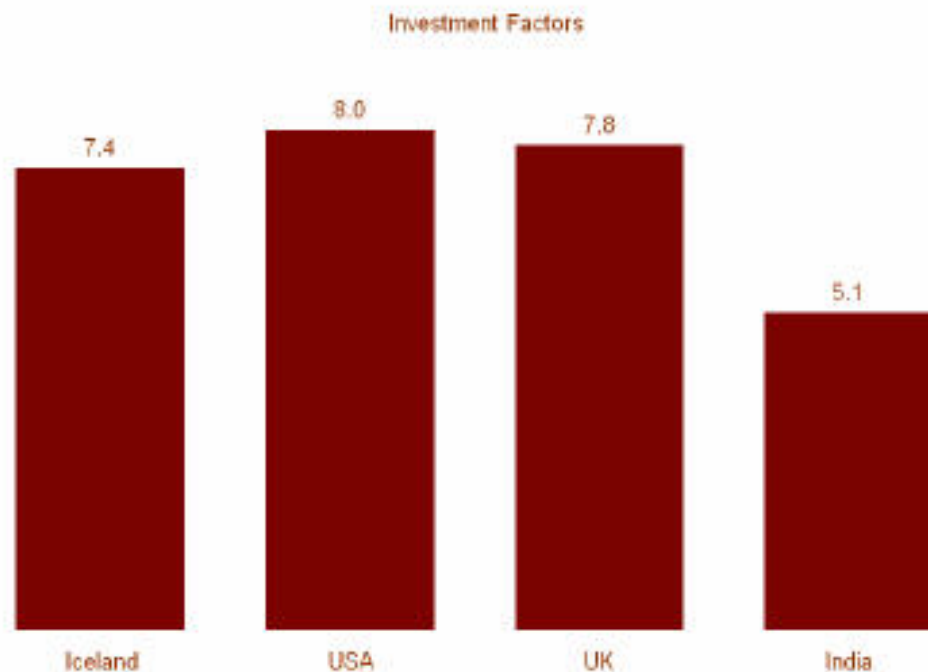
Qualitative criteria for the benchmark



Compared to the USA and the UK, only the score on disaster recovery facilities plan is lower.

Based on international and domestic transport infrastructure, the situation in terms of physical security and confidentiality of electronic data, possibilities to expand data centre operations over time and the existence of disaster recovery facilities plan, **Iceland's score is close to the Western benchmark locations.**

Qualitative criteria for the benchmark



This location category covers a number of enabling factors in terms of existence of qualifying physical-technical space, in terms of market and proof of concept and equally so the perceived strength of commitment of these enabling factors over the longer run. Finally the category assesses the ease of mobility of investments

In case of withdrawal decision of service or investment.

The existing data centre operations in Iceland are well functioning, though small to international standard. More importantly, there is **no identified need for larger operations based on local demand** and as a consequence, **limited qualifying free data centre space** is identified. Regulatory as well as business commitment is recognized to be supportive.

SWOT

Strengths

- **ICT focus**
 - High ICT diffusion and quality
 - ICT clustering
 - Private and government commitment
- **Reliability electrical supply**
 - World number 1 in energy supply

Opportunities

- **Green power**
 - Marketing instrument with high future potential along growing environmental awareness
- **Internationalisation**
 - International undiscovered territory
 - Tabula rasa for international community enabling opportunities for strong (business) image/profile building

Weaknesses

- **Limited ICT workforce base**
 - Small demographic community
 - Low unemployment rate
 - However highly skilled and qualitative education
- **Proof of concept**
 - Absence of reasonable scale data centres and international providers
- **International connectivity**
 - Risk factor in contingency plan data centre operators
 - Latency issues for North American market
- **Perception on natural disaster risk**
 - Negative influence on data centres location attractiveness

Threats

- **Competition emerging countries with low labour costs**