

# Annual report DCI

For executive year 2015



## **Chairman of board**

Eyjolfur Magnus Kristinsson

## **Other board memebers**

Isaac Kato, Verne global

Gunnar Zoëga, Nyherja

## **Key accountant**

Elinros Lindal



By the end of the executive year 2015 there are eight member companies in the DCI group (Data Centers in Iceland), which operates within SI – the Federation of Icelandic Industries as an association representing the interest of data centers in Iceland. The companies are: Advania, Borealis datacenter, GreenQloud, Nyherji, Opin Kerfi, Siminn, Verne Global and Vodafone. DCI are part of SUT (Association representing interest of IT & Telecommunication companies), Within SUT there are 60 IT related companies, both small, medium and large, that work on the issue of making Iceland a good location for IT. Last year DCI had 5 members companies, so addition to the association is a positive progress for the industry and shows the increase of interest and opportunity in Iceland for datacenters.

The turnover of the IT sector in Iceland was 85 billion ISK in 2014 and is likely going to be around 100 billion ISK in 2015. The turnover of the telecommunication sector was 55 billion ISK in 2014. Annual average growth has been around 20%. Export revenue for creative industries, telecommunication and IT was 44 billion ISK in 2014. Estimations in relations to numbers from two quarters for 2015 indicate double that number for 2015, or 90 billion ISK in 2015. Total number of employees in the IT sector was 4.500 in 2014 and 3.500 in the telecommunications sector the same year. Value: The proportion of IT and telecommunication in GDP for 2014 was 4,9% - for comparison the value for fish industry the same year was 4,9%, alumni industry 2,4% and construction industry 4,9%.

DCI board has met 4 times in the year 2015, held one general meeting with all DCI companies, where the board welcomed all companies aboard and discussed the issues that the board is focusing on. The board has also held one working session at Hannesarholt on the 24th of November, where 3 topics were discussed in depth. The issues are explained below and are Permanent establishment, issues of bandwidth and electricity. SI lawyer, Björg Ásta and DCI key accountant have met with Farice to discuss backhaul matters. Almar Guðmundsson CEO for SI and Eyjolfur Magnus, director of the DCI board, has met with foreign press (24th of August 2015) to discuss what DCI does and why Iceland is an interesting location for data centers. The board has also met with Bjarni Benendiktsson, minister of finance, to discuss issues of PE, Sigmundur David, prime minister, to discuss issues of PE and backhaul and Elvar Knútur, commissioner with the minister of industry, Ragnheiður Elín to discuss issues of backhaul.

### The issue of Permanent Establishment

As is often the case with technology and tax matters, the concept of permanent establishment is challenged when new business models, involving the ownership or leasing of computer servers in foreign jurisdictions, come into play. For both existing and prospective customers of Icelandic data centers, many of them will want solely to place their computer servers, whether owned or leased, in an Icelandic data center. They will not



initially seek to place their employees or other business operations in Iceland, but will instead outsource those functions to local Icelandic businesses. That raises the question of whether a server, or cluster of servers alone, requires the foreign customer of an Icelandic data center to create a permanent establishment. Icelandic law does not currently address this matter, and OECD guidelines stipulate that a server may create a PE, but does not necessarily do so. This creates ambiguity for prospective customers of Icelandic data centers, for whom the answer to this question may be critical.

Different countries have approached this challenging question in a number of ways. However, the UK, Ireland, and France, all major data center hubs, have taken the view that a server alone does not create a PE. If Iceland wants to be competitive in the data center industry they need to do the same as all major data center hubs. The benefit of resolving the PE question with this straightforward approach is that it would accelerate the growth of the data center industry in Iceland and promote Iceland's competitiveness in the sector.

### The Issues of bandwidth

Up to date Iceland has the competitive advantage in green energy, natural cooling and free land that could be available for data centers of various sizes. Iceland is closely located to major internet exchanges and connected to internet via 2 independent carriers. As it seems today, Iceland is not competitive with prices on backhaul. And although prices at Farice are not stated officially, many customers talk about the prices for bandwidth backhaul connection is up to five times more expensive in Iceland than the global average market price is today. Globally there are many governments and regions working to stimulate data center industry. And many attractive customers out there who need high amount of backhaul. But Farice seems to be constrained by financing/debt structure and will not be by their own words competitive within the next two years.

Also if Iceland wants to compete on global market, getting big data centers to the country, another backhaul connection needs to be made to the cable connecting Europe and USA for security reasons. If the country had that connection, all indicators point at the conclusions that Farice would get increased business from bigger buyers who would want to have both connections available.

Up to date, Farice uses only 5% of the cable and has no incentives in being competitive in prices or growing their business / increase use of cable.

### The issues of power

Up to date, the user of electricity is either a „small user“ or a „large user“ by definition. Small users get similar prices and agreements as average household in the country. „Large users“



get more security agreements from the producer of electricity, but have to do 10 year agreement with the provider of electricity. Security of electricity volume has also not been stable last months, as supply of electricity has been fluctuating. DCI wants to push for a „middle size user“ category – in which data centers and other middle size industry companies can be categorized. DCI suggests that agreements, made with middle size users, should be for shorter time than big users – 5 years instead of 10. Competitive prices and more variability. SI specialist in electricity, Bryndís Skúladóttir and Bjarni Már as well as Almar Guðmundsson federation CEO, have taken the matter up with the producers. The next step is to form the idea better, and introduce formally to government stakeholders.

### DCI education

Under the education strategy of SUT – DCI is also pushing for changes in the education system in Iceland. Where the main strategy is around the concept of IT industry having enough talent pool here in Iceland so that the industry can be competitive and grow as fast as it is growing each year. Children need to learn computer science at an early age, as other countries are now offering, and it is important that students know where the career possibilities are. Many studies show that unemployment rate is rising among university graduates. However, computer scientists, researchers, analysts and other technically trained people are lacking in Iceland today. This is one of the big challenges in the industry to have professionals working in the industry at any given time.

### Expad for DCI industry

Many positive changes have taken place and been promised recently to make Iceland an attractive destination for foreign experts. But World Economic Forum rates Iceland number 70 in attracting foreign experts into the country. Ministry of internal affairs and Ministry of welfare are making very important changes to the law of having foreign experts in the country. Bjarni Benediktsson, minister of finance, has also made promising bills, to make Iceland more attractive for foreign experts, where they get tax reduction similar to what other countries are offering today. We don't know what the law will look like, but it's a very important step in regards to competitiveness of the country, as well as important to increase knowledge and expertise in the country.

The Directorate of Labour and The Directorate of Immigration have also made changes in their practices that have resulted in possibilities for foreign experts to move to the country within four weeks.

It's clear that DCI won't get everything they have been lobbying for but important positive steps have been taken recently in making Iceland more inviting and competitive in attracting foreign talents to the country.



### **What does it take to make Iceland competitive for DC industry?**

Because of Iceland's position geographically, natural cooling and available land space, Iceland is already a very competitive location for data center industry. Cooler climate that works as a natural cooling system and green energy has put Iceland as a forerunner and promising country for data center industry.

Highly educated workforce as well as the safest country in the world (Global peace index), Iceland is an optimal country in many ways.

However, other economies are doing well in terms of competitiveness and are alluring foreign customers to the country with simple tax laws, low backhaul costs and other offerings that Iceland needs to be constantly monitoring.

As the country is built on old traditional industries, in many ways competitiveness is not our strongest points, especially for companies located in Iceland with their revenues abroad. However DCI believes that the datacenter industry is important to the local government and wants to supply as much data and information as possible to make sure that the country is using its possibilities as a data center location.

### **Lobbying for change with government**

DCI board has been meeting with prime minister Sigmundur Davíð because of PE issues, financial minister Bjarni Benediktsson because of tax related issues and backhaul prices, as well as having regular meetings with minister of industry Ragnheiður Elín. The meetings have been successful, but the DCI board feels that it could do even better in providing more info to the government, to make sure they have insight into the industry environment in different competitive economies. DCI have all intentions to work with the government. And all ministers have shown interest in the industry. The board hopes for some progress in the year of 2016 to make Iceland more competitive in as many areas as possible.

### **Participation in events**

#### **Landsvirkjun meeting about location of datacenters**

Landsvirkjun hosted an open meeting named: Datacenter looking for location the 5th of June 2015. Elinros Lindal, key accountant for DCI, facilitated the discussion. Philip Schneider, president for Selectors Guide Guild, talked about how important it is that Iceland has strong presence, marketing wise. That Iceland has to do better in marketing the country as a data center country.

### **Utmessan / Taeknistiginn**

DCI has been offered to participate in Tæklistiginn at Utmessan in Harpan the 5th and 6th of February 2016. We hope that the presence of one datacenter will educate the general public



about the positive effects on economy a data center industry can have in the country. Also, even though we are living in digital transformation time, the general public does not always get the important part data centers play in storing data – so hopefully Tæknistiginn will be a step in that direction.

## Boards that DCI have members in

### Hátækni- og sprotavettvangur – HSV / Eyjolfur Magnus Kristinsson

The major goal of the platform is to make the environment more competitive and better for creative industries in Iceland. Director of the board for DCI, SUT (IT industry), IGI (Icelandic gaming industry), SSP (new ventures), SÍL (biotech companies), SÍK (movie industry), and SHI (health industry) – meet regularly with the ministry of finance, welfare and industry to talk about changes that need to be made and make suggestions of how it's best to grow creative industry in the country. Issues of R&D, taxes, foreign expert, competitive funds (Rannís) etc, are discussed regularly. Technology and innovation congress, was held in the beginning of December where Bjarni Benediktsson, minister of finance, talked about several issues that have been raised at the HSV platform. Promising matter that will make Iceland more competitive. See his speech:

[https://www.fjarmalaraduneyti.is/radherra/raedur\\_og\\_greinar/raeda-fjarmala-og-efnahagsradherra-a-taekni-og-hugverkathingi-4-desember-2015](https://www.fjarmalaraduneyti.is/radherra/raedur_og_greinar/raeda-fjarmala-og-efnahagsradherra-a-taekni-og-hugverkathingi-4-desember-2015). Ragnheiður Elín, minister of industry also addressed the meeting with a plan to help new ventures, see more about it here: <https://www.atvinnuvegaraduneyti.is/idnadar-og-vidskiptamal/frettir/adgerdaaetlun-i-thagu-frumkvodla-og-sprotafyrirtaekja-til-umsagnar>

### Utilization of the internet / Elinros Lindal

A working group about ways to utilize the internet was established in the beginning of year 2015, and Elinros Lindal has been representing DCI in the group. She has raised the matter of backhaul prices and PE issues with the group which has been taken positively. But in order for Iceland to be competitive in the area where people talk about „the internet of things“ – the general public should be able to download on competitive prices and there the issue of Farice has come up.

### What more could DCI do?

DCI could organize a working session with other stakeholders of the Datacenter industry, for example Farice, Invest in Iceland and Landsvirkjun in order to get more consensus and understanding about it's matters.



DCI needs to take up lobbying with Landsvirkjun for „middle size user“ of energy next executive year, for the option of being a big user, includes too much investment for some companies within DCI and being a „small user“ does not benefit the DCI industry. Middle size user could be the right size for the Datacenter industry in Iceland, who needs flexibility in electricity usage, relatively good prices and no investments in connection or infrastructure.

DCI could also do more in educating the general public about the datacenter industry. What does it mean to have a strong datacenter industry in the country, do general consumers use datacenter services. How does the issue of bandwidth relate to the general public, etc.

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Eyjolfur Magnus Kristinsson, Advania.