POLICY ON THE USE OF INFORMATION TECHNOLOGY AT THE CITY OF REYKJAVÍK 2018-2022

1. FIELD AND FUNCTION

A policy on the use of information technology at the City of Reykjavík concerns all the city's departments and Reykjavík City Council. The objective is to present the city's priorities in information technology affairs for the next four years. The term information technology refers to the utilization of information and other material from various mediums, particularly in electronic format. In essence, the policy stipulates that information technology should be used in a purposeful way to enforce the city's priorities in every field. The policy is thus meant to support other policies, such as the service policy and information policy, as well as the objectives of Reykjavík City Council, each specialised department and the city's offices. Information technology is one of the most dynamic forces in the innovation and reshaping of the City of Reykjavík's operations. It forms a basis to improve quality and the city's services and institute better communication with residents. A policy bound utilization of information technology provides a better overview of the city's data which leads to better decision making and increases efficiency, economy and transparency. Furthermore, diverse and progressive utilization of information technology can promote environmental protection and green thinking.

Information technology is constantly changing and involves all the city's departments. In order to reach the policy's objectives, technical infrastructure has to be in place, but it is imperative to keep in mind that the policy in itself is not a policy on technology. The list of projects that could be executed is inexhaustible and there is no lack of opportunities for reform with the aid of information technology. Therefore, prioritization is important and with this policy a strategy is set for the next four years, which will then be implemented each year in a special action plan. The action plan will be funded through the investment program "New Information Systems", which the Information Technology Division supervises.

2. STATUS ASSESSMENT AND MAIN CHALLENGES

In the last decade, the City of Reykjavík has changed the arrangement of information technology affairs by making their management more central under the supervision of the information technology division. The target has been to gain an overview of all systems and contracts in the field of information technology in place at the City of Reykjavík. The Information Technology Division has increasingly been involved in contract making in the field of information technology at the city and the goal is that the IT Division will take responsibility for all contracts in this field, instead of them being in the hands of each department. In the last years, the Information Technology Division has supervised the investment program "New Information Systems". The program includes investments in new technology, new software systems, and new developments of systems already in operation. All the city's departments can apply for specific projects in the field of information technology to be funded by this item.

In the last years an effort has been made to meet the cumulated need for the upgrading of information technology since the economic collapse in 2008. This need has now been met, at least in regard to the upgrading of equipment, but it is apparent that the development of work and teaching methods in schools and leisure activity (i.a. with the introduction of electronic tests and new emphases in the curriculum) calls for increased purchase of equipment. It is also apparent that many of the systems already in use at the city do not fulfil the newest requirements for such systems. In

addition, new laws on personal privacy call for different work procedures. It is therefore time to set a new vision on the uses of information technology in the next years.

Information technology is an expensive field that usually turns in profit even though it is not always obvious or measurable. The appropriate utilisation of information technology is the prerequisite for reducing waste and increasing efficiency in every field. The lifetime of information systems varies because rapid technological changes and innovation call for different work methods. Investment in transformed and better technology that is well implemented gives multiple returns in increased performance, better services, more efficiency, increased security and thereby more reliability. Progress in information technology creates opportunities for further joint ventures and improved utilisation of the funding used on operating information technology systems. It is therefore important to inform employees, managers, and politicians about information technology, so the city can make the best use of it. It is also necessary to increase co-operation between departments and offices to gain even more quality in operations and services. The main challenges of the City of Reykjavík for this policy to be realized is to prevent decisions being made that work against its objectives, that funding to the field will be reduced and that the policy's implementation will be incomplete. It is therefore important to make regular status assessments in this field and take action if needed. It is furthermore necessary to introduce the policy adequately and promote it throughout its duration. A profitability assessment is also preferable for bigger projects where applicable.

3. VISION AND MAIN OBJECTIVES

In the coming years, the City of Reykjavík looks toward information technology being systematically used to reduce waste and enhance productivity in operations, improve service and promote increased transparency towards its citizens.

The main objective of the Policy of the Use of Information Technology at the City of Reykjavík is that information technology will be used in a sensible and enlightened way so that it enables the city to reach its objectives in every field. For that to happen, a close eye must be kept on technology development while ensuring that innovations are only implemented after serious consideration. A holistic view must be taken, and existing infrastructure and solutions taken into account. It is important to find and utilize information technology solutions that reduce waste and increase efficiency in the city's operations. That mainly involves improving services to citizens by modern means, promoting environmentally friendly solutions, stronger support of the city's operations and increased transparency and more open data.

4. SUB-OBJECTIVES

The policy's sub-objectives are four in all and support the vision and main objectives listed above.

1. Ensuring basic function

Decisive steps should be taken to ensure that the city's technological infrastructure is sturdy enough for all the city's departments and offices being able to use information technology to reach their objectives. That entails i.a. that the technological service for the departments and offices is regularly revised and clearly presented. It also has to be guaranteed that there is existing knowledge to use the information technology equipment available at each time.

It is necessary for connections to be powerful and secure and that software is adequate for the registering of data, the analysis of data and the interconnection of data between systems. When new software is taken into use, care must be taken that it builds on open standards and technical specification with the objective to reduce the cost of development and increase interoperability. In accordance with other policies of the city and the European Union's emphases, an emphasis is placed on reusable, open and free solutions, wherever applicable and practical. The prioritization of

software should support operational basic needs, so that regular services and mandatory projects have priority over other software projects in the development of information systems.

2. Increased effectiveness

Information technology should be used to improve management, reduce waste and increase effectiveness in the city's operations. New solutions bring opportunities to increase operational flexibility. Joint procurement in the field of information technology has returned great savings and therefore an emphasis is placed on further supporting joint purchases.

Good management and decision making are based on data. Powerful analytical tools must therefore be present so that key figures and indicators can be easily deduced. Information technology should be used to support co-ordinated registration of data. An accessible overview of the city's data must also be established and employees' access to the data they need for their work ensured. Furthermore, access to open data should be improved, not only by providing general access to data but also by enabling all users to use, transform and share data by any method they choose. In addition, public access to open data and open consultation processes bring opportunities for improved effectiveness at the City of Reykjavík.

3. Improved service

Information technology should be used to provide exemplary services and enable the City of Reykjavík to be in a leading position as a service provider in the public sector. Electronic service should be the first choice and therefore processes and applications will be systematically made electronic and the city's data bases interconnected as well, so that citizens can tend to their affairs in one place. Information needs to be interconnected so that data travels between places and not people, as far as the law permits. The design should be universal so that everyone can use the service.

4. Progressive use

The City of Reykjavík will promote a responsible, diverse and progressive use of information technology.

Information technology should increasingly be used for innovation and enable more environmentally friendly solutions in all the city's departments. It is imperative to establish knowledge of the possibilities and uses of information technology to maximize its utility i.a. to improve information provision, services and education.

Information- and technology literacy should be strengthened, and computer games, programming and other diverse tools of information technology used more frequently, when applicable. The mediation of culture and development of experiences will be driven by the use of information technology where user-oriented design is the point of reference.

5. INDICATORS OF SUB-OBJECTIVES

In the table below are indicators for each sub-objective of the policy, objectively measuring the progress of the objective. A status assessment of the policy shall be made by referring to these indicators.

Nr.	**Objective**	**Indicators**	**Situation 2017**	**Guidelines 2020**	**Guidelines 2022**
1	Ensure basic function.	Internet connections at the city's workplaces.	Around 25% of all connections are xDSL.	The percentage will be 2%.	The percentage will be 1%.
		Number of operational incidents.	22	They have decreased by 25%.	They have decreased by 50%.
		Number of security incidents.	21	They have decreased by 25%.	They have decreased by 50%.
2	Increased efficiency.	An accessible overview of the city's data and systems.	No overview available of the city's data and systems.	All of the city's data and systems are mapped and diagnostic tools for educing key figures fully instilled.	All connections between the city's systems are mapped.
		Registrations and hosting of data.	Data is often repeatedly registered and saved. Co-ordinated work procedures in registration are lacking and traceability is not sufficient.	The hosting of data has been mapped. .	The number of hosts will have been reduced by 50% and co-ordinated work procedures introduced.
		Access to open data.	The City of Reykjavík has ten data packages at the website opingogn.is.	They will have increased by 50%.	All data will be published as open data unless valid reasons, such as laws on personal privacy, prohibit it.
3	Improved service.	Number of applications in electronic format.	Ca. 50% of all application forms at the city are available in an electronic format.	The percentage will be 80%.	All application forms will be fully electronic.
		Increased self-service.	There is almost no self-service available at the City of Reykjavík and a lack of interconnectedness of data and systems.	An overview will have been gained over service procedures that can become electronic. The instalment of a self-service system will have started.	Self-service will be residents' first option.
4	Progressive utilisation.	Number of electronic Signatures.	Electronic signatures have not been introduced at the City of Reykjavík.	10% of all documents created at the city will be electronically signed. Travel permits will only be signed electronically.	50% of all documents created at the city will be electronically signed. All minutes of meetings will be electronically signed when a signature is needed.
		Informative meetings on information technology.	The Information Technology Division does not have regular introductions on the use of information technology at the city's departments and offices.	A formal co-operative platform between the IT division and individual departments and divisions in the field of information technology will be formed. The IT division will have held at least one introduction in each department/division.	An educational program on the use of information technology will be organised each year in co-operation with the Office of Human Resources. There will also be education made available on digital sense of citizenship, the protection of personal privacy and more concerning information technology.

6. ACTION PLAN

A special list of projects (an action plan) will be made each year to follow up on this policy. All the projects of the plan must be policy's main objective and promote the progress of at least one of the policy's sub-objectives. conform to the policy's funding will be based on the investment plan "New information systems", supervised by the Information Technology Division. All of the city's departments and offices can apply for certain projects or parts of projects in the field of information technology be financed by this plan.