**Smart City X strategy**

Place, date, version

Authors: X

# Management Summary

*Here the strategy is summarised and the following points can serve as a guide:*

* *Challenges for city X, reasons for the necessity of a smart city strategy*
* *Goals of the strategy (e.g.: creating a common understanding of Smart City, defining goals and topics, organizational anchoring and implementation, showing the necessary resources for planning and implementation, showing possible projects)*
* *Identify the most important contents of the strategy (creation of a core team/specialist unit, provision of funds/loans, internal/external parties involved)*

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# Purpose and Initial Situation

## Fundamentals of Smart City

Description of the challenges of a modern city and how these can be solved in a Smart City.

* *Please describe briefly the environment in your city and the current challenges. In a further step, use a short example to describe how you could solve the challenges with smart city approaches.*

## Why a Smart City Strategy?

What are the goals and what is the benefit of a strategy?

* *What benefits do you hope to gain from the smart city strategy?*

## Previous Smart City Activities of the City X

Listing of the SC projects of city X to date with brief explanations of the projects and the partners involved.

* *How is the Smart City theme already anchored in the city? Which departments, universities and partners have been involved so far? Which urban goals can be linked to the Smart City theme (e.g.: Energiestadt / 2000-Watt-Gesellschaft)?*

## Definition Smart City X

It makes sense to create a definition related to the city from the various definitions that are circulating. Definitions of other cities can also serve as an example:

* Winterthur: "The Smart City Winterthur is an innovative, progressive and networked city that puts people and the environment at the centre of its activities. It is characterized by a high quality of life and efficient use of resources. This is achieved through the intelligent networking of infrastructures with modern technologies and by involving relevant stakeholders. Social, economic, ecological and cultural requirements are considered." (City of Winterthur (2018). *Strategy Smart City Winterthur*)
* Zurich: “*Smart* means networking people, organizations or infrastructures in such a way that social, ecological or economic added value is created.” (City of Zurich (2018). *Strategy Smart City Zurich*)
* Vienna: Smart City Vienna refers to the development of a city that prioritizes and links the topics of energy, mobility, buildings and infrastructure. The following premises apply:
	+ Radical conservation of resources
	+ High, socially balanced quality of life
	+ Development and productive use of innovations/new technologies

This should comprehensively guarantee the future viability of the city. An elementary characteristic of Smart City Vienna is its holistic approach. This includes new mechanisms for action and coordination of politics and administration as well as the expansion of the citizens' scope of action. (City of Vienna (2014). *Smart City Vienna Framework Strategy*).

## Initial Situation of the City X

### Situation Analysis

*Description of the local/national/international environment and factors influencing the city X.*

*What happens in the city's environment? What factors determine the urban environment?*

### Strengths and Weaknesses

*Examples of strengths:*

* *Expertise available within the city administration*
* *The different departments are used to working together on projects and sharing their knowledge*
* *A central coordination office for SC issues is/will be established*
* *Experience with digitisation projects*
* *Already installed LPWAN network / well developed infrastructure*
* *Committed population/associations*
* *Good networking in existing SC networks (IG Smart City, Smart City Hub Switzerland)*
* *Open error culture: learning from mistakes*

*Examples of weaknesses:*

* *Silo thinking within the city administration very pronounced*
* *No central coordination point for SC issues, unclear responsibilities*
* *Financing of SC projects complicated*
* *No open error culture*
* *Projects must necessarily bring financial benefits*
* *The topic of SC is foreign or negatively associated with a large part of the population*

### Opportunities and Risks

*Examples of opportunities*

*- Climate targets provide an opportunity for fundamental innovation*

*- Digitization enables simpler processes*

*- Better informed population can participate more easily*

*Examples of risks*

*- Rapidly progressing urbanization*

*- Higher energy consumption / person*

*- Climate risks*

# Strategic Objectives and Topics

## Strategic Goals and Vision/Mission Statement

In order not to exclude possible projects from the outset, the strategic objectives should not be set too narrowly. The Smart City Winterthur strategy lists the following points, for example:

*“The City of Winterthur as an innovative, efficient and resource-saving city*

* *Implementation of solutions to improve the quality of life and conserve resources in the areas of energy, mobility, smart government, education and innovation, housing, health and old age, information and communication technology.*
* *Creation of added value for the population, companies and administration.*
* *Progress towards the 2000-watt society in order to achieve the goals set out in the Energy Concept 2050 together with various players.*
* *Positioning as a Smart City pioneer city.*
* *The City of Winterthur as a cooperation partner*
* *Integration and use of the know-how and resources of companies, the population and educational institutions to jointly shape the Smart City Winterthur.*
* *Promotion of knowledge transfer and cooperation at local, regional, national and international level.*
* *Creating the conditions for the joint implementation of projects with various partners.*
* *Informing and sensitising the stakeholders to the development of the Smart City.*
* *Smart City contributes to ensuring that Winterthur remains an attractive location for companies.*

*The City of Winterthur as an intelligent, networked and safe city*

* *Involving and networking the inhabitants of Winterthur, targeted use of urban infrastructures, processes and data as the basis for efficient and user-friendly solutions.*
* *Recognition and use of new technologies and approaches such as Internet of Things, Open Government Data, Big Data, Cloud-Computing etc. to implement beneficial solutions.*
* *Ensuring data protection and data security.*

*Die Stadtverwaltung Winterthur als wichtigste Smart City Winterthur Treiberin*

*Winterthur City Council as the most important Smart City Winterthur driver*

* *Smart City Winterthur is institutionalised within the city administration and tasks, competencies and responsibilities are regulated.*
* *Cooperation across departments and offices has been successfully strengthened and is highly accepted and effective.*
* *The city administration creates the necessary framework conditions to enable and support Smart City projects”.*

 *(based on: Stadt Winterthur (2018). Strategie Smart City Winterthur. p.12)*

## Stakeholders and Their Needs

*Auflistung der Anspruchsgruppen innerhalb der Stadt X, z.B.:*

* *Bevölkerung*
* *Wirtschaft*
* *Politik*
* *Zivilgesellschaftliche Akteure (Vereine, Organisationen)*
* *Wissenschaft*

*Dazu sollten die jeweiligen Interessen/Bedürfnisse erklärt werden, wie die verschiedenen Gruppen eingebunden werden können und wie langfristige Kooperationen aussehen könnten*.

## The 6 Fields of Action

Figure 1: Fields of action in the Smart City (Source: Swiss Federal Office of Energy, SwissEnergy)

The following 6 fields of action are recommended to

subdivide the Smart City projects:

* **Smart Energy and Environment:** resource- and environmentally friendly development of the urban environment (buildings, public spaces, infrastructure systems), promotion of renewable energies and use of synergy potentials
* **Smart Economy:** Establishment of an innovative, resource-saving and open economic system that relies on networking, cooperation, recycling management and flexible working models
* **Smart Living:** Ensuring a barrier-free, collaborative, safe and healthy life based on equal opportunities
* **Smart Mobility:** creating clean mobility and logistics, promoting efficient means of transport, intermodality and sharing concepts
* **Smart People:** using and promoting residents' resources and ensuring "lifelong learning", participation, social integration and openness to creativity
* **Smart Government:** Intelligent, needs-oriented and transparent control of municipal administrative processes and infrastructure

## Programme Smart City X

The following chapter consists of parts of the Smart City Winterthur strategy (source: Stadt Winterthur (2018). Strategie Smart City Winterthur. S.15-16)

*What does the Smart City X program include and who coordinates it?*

*Who initiates the projects (departments, population, universities, civil society actors or companies)?*

*What are the objectives of the strategy (more concretely than strategic level), how is the strategy implemented?*

## Steering Comittee

*Who sits on the steering committee (existing or newly established body)?*

*What are the tasks of the steering committee?*

*🡪Examples:*

* *Strategic directional decisions*
* *Definition of the main topics*
* *Assignments to the programme management*
* *Decision on the use of the innovation credit*
* *Representation and communication both internally and externally..*

## Programme Management

*Takes over the operational management of the innovation team and submits proposals to the steering committee.*

## Innovation Team

*Is intended to serve as a platform for the Smart City representatives from the various departments. The aim is an interdepartmental exchange, whereby silo solutions are to be minimized and ideas for joint projects are to be further developed.*

*Possible tasks:*

* *Exchange platform for projects*
* *Evaluation of applications from the departments*
* *Recommendation for projects to the steering committee*
* *Promotion of innovation*
* *Leadership Smart City*
* *Networking at local, national and international level*
* *Information and contact persons within the department*

## Expert Unit

*The specialist unit is to serve as a coordination office, which is responsible for communication and networking within and outside the administration. It is the central point of contact for all matters relating to Smart City. Further areas of responsibility may be:*

* *Smart City programme management*
* *Central contact point for all actors on the topic of Smart City*
* *Initiation and coordination of smart city projects*
* *Managing a Smart City project portfolio*
* *Monitoring of trends*
* *Development of a partner network*
* *Networking with local, national and international actors*
* *External communication on behalf of the steering committee*
* *Controlling the costs of ongoing projects*

# Implementation

## Creation of the Smart City specialist unit and the Smart City Innovation Team

*Why do we need the specialist unit and the innovation team?*

*How are the positions filled (conversion of internal administrative positions / employment of external specialists)?*

## Provision of Financing

*How is the financing of the projects guaranteed?*

*What is the total annual volume that is provided for the specialist unit, the innovation team and the Smart City projects?*

*How is the budget divided up for the individual items?*

*What are the criteria for funding?*

## Implementation of Smart City Projects

### Criteria for Smart City Projects

*What criteria do Smart City projects have to meet to be eligible for funding under the Smart City programme?*

*Which committee makes the final decision on funding?*

|  |  |
| --- | --- |
| Kriterium | Erfüllung |
| Relevant | The project is related to the city of Winterthur and offers a demand-oriented added value. |
| Innovative | The project has an innovative content. It networks infrastructure and stakeholders. |
| Economical | Effort and risks of the project are proportionate. |
| Sustainable | The project increases the quality of life of the residents or conserves resources. |

Figure 2: Criteria for smart city projects (based on: Stadt Winterthur (2018). Strategie Smart City Winterthur. S.18)

### Financing of Projects

*What is the procedure for financing a project?*

*Which authority submits a credit application and to whom must it be addressed?*

### Implementation of Projects

*How are the projects implemented, who is the responsible person?*

*How is the process controlled and the status of the project reported to the specialist department for updating the Smart City project portfolio?*

## Communication

*Creation of a communication concept*

# Scope and Entry Into force

*From which authority is the smart city strategy implemented?*

*For which administrative units is the strategy relevant?*

*Which external organisations are involved in the Smart City process?*