

## RTD Fact Sheet Template

### TECHNOLOGICAL CONTEXT ANALYSIS OF THE EXISTING SYSTEM, NEW TECHNOLOGIES MARKET ANALYSIS, CHECK ON TECHNOLOGICAL COMPATIBILITIES OF THE AUTHENTICATION SYSTEM AND NEW SYSTEM DETAIL PLAN RTD FACT SHEET\*

<b>Reference Measure</b>	3.3 New regulation in pedestrian areas in city centre
<b>Date of Submission</b>	5/12/2011
<b>Date of Approval</b>	February 2012 (by ISIS)
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### Context and Purpose

The technological system which regulates the entrances in the historical city centre is obsolete and doesn't carry out its mission. The measure is aimed at updating the existent software to protect further the city centre from unauthorised accesses and to improve the semi-pedestrian roads which grant a low environmental zone impact in the city.

The system main problems are related to: i) its strictness (the software is developed on a platform supplier's that is not freely modifiable and that cannot be easily integrated with other accesses management systems). If the user of an obsolete software needs some modifications these often are not available or they are very expensive because of the necessity to restudy old algorithms spending and wasting time; ii) the improper use of passwords: passwords are given to everybody has a right to enter the limited traffic zone (e.g. residents, hotels, shops, public services, ambulances..) but unfortunately the Municipality faced the problem of the "pass the word" from people and by consequence of a greater number of people who have access to the center compared to those who actually have the right to.

Furthermore, the Municipality faced difficulties in managing a single supplier for both the software part and for the mechanical one: difficulties related to the maintenance of pillars and to software maintenance and management. Considering that the software management and the mechanical aspects connected with the pillars functioning are very different and manageable by subjects with specific skills, the Municipality has decided to hire two distinctive suppliers.

In order to permit the measure development the RTD analysis was aimed to the preliminary definition of the new system technical and technological features to search.

### Description of RTD Activity

The RTD consisted in a research aimed at understanding what are the main needs of the city and at providing the public administration of a complete vision of the supply system (market research): the Municipality intended to understand all the technological options supplied by the market and the actual number of suppliers on the market. This research activity was realised under the assistance of a private consultant (Laboratori Marconi) and the results were preliminary in order to define the system characteristics related to the Municipality needs with particular reference: i) to the possibility to integrate the system with other tools (e.g. RITA or SIRIO) and ii) to a more flexible pillars management without being linked of the overall system modification. Basing on the research results the public tender specifications for the software management have been defined.

Three companies reply the announcement for the software part and one of them won the contract. The requirements of the new service are: i) Use of CALYPSO protocol; ii) Flexibility on passwords use and possibility to personalize them; iii) Using of system which refers to WEBSERVICE.

CALYPSO protocol has a large use in Emilia –Romagna Region (that adopted it for the regional

ticketing system) and in public transport companies; its introduction allows the Municipality to work with a system which can be easily integrated and with a database which can “speak” with others. The new protocol will be integrated with the use of a new mobility smart card (electronic purse) which can be applied for many mobility topics (e.g. for parking payment, entrances in LTZ, subscriptions payment, etc... ). This new instrument will: i) be more agile and flexible, satisfying users needs considering that the protocol has locally already a huge application; ii) permit to manage access requests from other systems than the smart card, like mobile or entry phones; iii) permit to integrate old smart cards and pillars that will be gradually substituted; iv) reduce smart cards purchasing costs having only one kind of smart card for many mobility systems. This flexibility could be useful for the passwords assignment: every category user could have his own password and if necessary someone could have his personal code; in this way it will be easier both to supervise the entrances and to understand where and if there are some kind of abuses.

## Outputs and Results

The main objective of this phase of work was to be able to separate the two part of the project: one is the implementation of the new software, the other one is the periodical and occasional maintenance of the physical, electro-mechanical infrastructure. Usually who studies and implements softwares is not so interested in maintenance problem as one who does it as its personal core business. The separation of this two activities allows a better solution for the optimization of the service. The analysis has been useful to understand how these two aspects can be separate and to define the tasks to assign. At the moment the objective above can be considered reached. The public bid for the software management permitted already to obtain economical savings.

The company who won the bid is preparing the executive plan (the system is expecting to be ready at the end of January 2012)

## Resulting Decision-making

The above results and the activity of research are essential for the functional development of the service in order to develop a system which can have future implementations and not already obsolete when its operation phase starts.

## Lessons Learnt

The analysis underlines how new systems are often cheaper than old ones used by Public Administrations and how obsolete technologies are not sufficiently flexible in order to support citizens needs. As often it happens to technological instrumentation, the system updating is more expensive than the implementation of a new one (software owners have to regain the old code and to restudy it for its implementation) which probably will have better performances and a more possible development for the future..

When a technological instrument wants to be adopted by a Public Administration it is very important to do a market analysis and to check the product that can satisfy its needs having the better costs/ requirement ratio.

The best solution could cost less than the others or than the choice of not to change softwares or old technologies. In this sense is important for a public administration to strengthens and to implement the know-how of its employees.

## Cost-effectiveness

The results are in line with expectations and supported informed decisions

It's important to reassert the relevance of an adequate know-how of public administration managers, in order to save public money.

## Dissemination and Exploitation

Some meetings with the stakeholders have been organised in order to involve them in the definition of the implantation plan of the measure.

A communication campaign will be deployed, in order to inform citizens about the functioning of the new software.