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## FROM THE QUILL PEN TO CYBERADMINISTRATION: THE INFOSTAR EXPERIENCE

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### 1. Introduction

*I have the honour and the pleasure of introducing you to our experience with the 'Infostar' system, which is the central computerised civil-status register that Switzerland introduced a few years ago to manage all civil-status records in the country.*

*First of all, I am keen to mention that I am not a civil-status specialist, but that I participated in the design and development of this new system as a specialist in organising IT for public administration, since at the time I was in charge of IT for the Federal Office of Justice. Since then, I have left the public services in order to become an independent consultant. My opinions are thus not necessarily representative of the federal civil-status office's opinions, and all the eminent members of the Swiss civil-status department present today will not always agree with what I will say, as I am going to simplify things a little. That said, I feel that I was very lucky to have a chance to contribute to the computerisation of such a fundamentally important service as civil status is to a country. It is thanks to all of these people, with their excellent work ethic, that I learned to like the subject. If I am present at this conference today, it is also so that I might communicate to you my passion for civil status.*

*I will begin by talking about the genesis of Infostar, mentioning the situation before the project, the reasons that led to its inception and its objectives. I will provide examples of problems encountered and challenges that had to be met. I will then describe the results by presenting the current situation, while attempting to learn some lessons from the exercise. I will then formulate a few personal observations on the future of civil status, its organisation and the tools available to it, still from my point of view as a computer expert and organiser.*

### 2. The computerisation of civil status in Switzerland with Infostar

#### 2.1 Infostar: initial situation

*I would like to remind you first of all that Switzerland is a country of approximately 7 million inhabitants, divided into 26 cantons and roughly 3000 districts.*

*Before developing Infostar, Switzerland had nearly 2000 civil-status offices, and each civil-status district held four event registers, but also - a Swiss peculiarity - a register of families, kept at the 'place of origin', and containing all the 'citizens' of the district, wherever they may reside, in Switzerland or abroad. In principle, in this register, one page was completed for each adult male, where all events of his life were mentioned - birth, marriage, children, death - but women only obtained one of those pages if they were single mothers, or married to a foreigner.*

*At this time, Switzerland employed roughly 3000 civil registrars, working for the most part on a part-time basis, which was the equivalent of around 700 full-time posts. Most of the records, especially in small districts, were written on paper, and the registrations were done by hand, typewriter, or using text-processing systems. There were already computerised solutions in large districts, but computerised data were not stored, as they were entered and then printed out, without being kept in digital form. From the point of view of a computer expert, the entire Swiss civil-status system at the time cost an estimated 45 million Euros per year.*

#### 2.2 Infostar: aims

*Originally, in 1997, the aim of the project that led to Infostar was mainly to improve the procedures relating to family registers, and to achieve equality between men and women, since women, except those who had a child without a Swiss father, did not have their own page in these registers. This meant, however, that maintaining family registers would be even more costly. This then led to the second most important aim, to convince political and financial authorities: recording each event one time only, allowing automatic updating of all other dependent registers. A global IT system was already a huge change, so we did not wish to make any other changes at the same time, and the objective at the time was to avoid having any effect on the allotment of tasks and the jurisdiction of the cantons. Finally, the aim was also to automate the exchange of*

data between civil-status services and other administrative services, the statistics office first of all, then offices in charge of monitoring inhabitants or hospitals, for instance.

### **2.3 Infostar: material considerations**

As well as the usual problems one encounters during an IT project, it was necessary to come to a decision on several major questions during the development of the system, the most important being whether it was necessary to build a central system for all of Switzerland, or rather to build a system of automated exchanges between decentralised systems, for instance one system per canton. In the end, the central system was adopted.

Another important question to be resolved was how to move from the old system to the new one. Should only people involved in new events be entered into the system? Should the entire population be systematically added? Or should we opt for an intermediate solution? Entering the entire population would have turned out to be extremely expensive, as, totalling up all the hours of work, it was possible to estimate the cost at roughly 100 million, which is ten times more than the development of the system itself.

During the development of the system, the question also came up of the relation between perfectionism and cost, particularly the number of different forms we would need to program, since IT could allow the user to print a specific form for the case in question, simply by pressing a button. It is clear that future users and financial managers do not share each other's opinions on this topic.

Finally, another question regarded the choice of the contractor, for developing the system and exploiting it later on. The choice was given to the cantons to appoint a contractor inside the justice or police department or to commission an outside contractor. Finally, the confederation was chosen to create and exploit the system.

### **2.4 Infostar: the real challenges**

As is often the case in an IT project, it was not technical or material questions that posed the most difficulties, but questions of competency and financing. The greatest challenge consisted in overcoming all of the problems inherent to federalism, starting with finding a competent representative in the cantons who was able to negotiate with the confederation and find out which entity could make a decision implicating all cantons, which was not easy, since, in the cantons, civil status is sometimes a matter for the justice department, and sometimes the department of the interior. Long discussions then took place as to financing and sharing the costs between the confederation and the cantons, and, currently, debates on this subject are still not entirely closed. Finally, there were also fears in the districts, who were afraid of losing their autonomy and their competencies, as they already had, in parallel, a professionalisation project, declaring that civil status would have to represent at least 40% of the time spent in order to be retained, which already called for reorganisation, or rather centralisation, of civil status in many cantons.

In fact, the execution of a project of such complexity revealed itself to be virtually impossible, as we had no power of decision, given all the difficulties to overcome and the fact that we had some 2000 equal partners, often sensitive. And if one thing surprises me, even today, it is that, in the end, in spite of these particularly difficult circumstances, we managed to carry out the project successfully.

### **2.5 Infostar: the result**

The Infostar system was launched between 2003 and 2005, for all of Switzerland and for all civil-status records. The whole enterprise lasted two years longer than expected, and cost twice as much as the initial estimate. The total cost of the investment was approximately 10 million Swiss Francs. The excess in the cost is mainly due to the efforts needed to introduce Infostar, or rather to switch from the old system to the new, and everything this implied in terms of planning, intermediate systems, training, writing instruction manuals, translation of the said manuals into three languages, as all of this turned out to be a lot more complex and costly than expected.

Now that the system is in place, it works, and moreover it works to everyone's satisfaction, to the extent that many wonder how they managed to work before this system was implemented. The first sizeable extension to the project was even carried out in 2006, when the registered partnership was introduced into Swiss law. Currently, approximately a thousand people work with Infostar, and nearly 6 million people are recorded in it.

With hindsight, we are noting various benefits. Where it was previously necessary to record an event several times, it is now only necessary to do it once, which represents a considerable time gain, but also an economic gain. Even with the cost overrun, the global price is approximately 3 million Swiss Francs per year, which amounts to roughly 4,000 Swiss Francs per workstation, which does not seem very expensive if you compare this sum to other activity sectors, such as for instance the 15,000 to 40,000 Francs of a workstation in the banking sector.

In conclusion, everyone agrees that the system is a success and that Infostar as a work tool is practical, reliable, and performs well. The only points that give rise to discussion anymore concern the organisation of the competent authority, and financing.

## **2.6 Infostar: successful elements**

If one were to summarize the experience, trying to establish what contributed to the success of the project, in spite of all the initial difficulties, there are a few dominant elements. First of all, it is imperative that the project should result in clear and precise advantages, so that each of the users may understand its utility. In our case, this was the fact that each event would only have to be recorded once, whereas before, the process required two or more recordings, and the time thus saved has been evaluated as being at least 10% of the total effort.

Then, one should not necessarily strive to change at all costs what would be possible and even reasonable to start with. In so much as the situation is already complex enough, one has to limit oneself at first to indispensable elements, in order to not upset the system in place too much, and defer other possible advantages to a later date. In our case, having regard to the great change already brought about by the system, we retained the existing organisation and the attributions of the place of origin, which is still responsible for certain documents.

Finally, without executive power of one's own, one needs at least to be certain of the strong involvement and unfailing support of the people in charge. Recently, I met the manager of the civil-status department of a relatively large town abroad, who works with 80 collaborators. This manager told me that they were thinking about computerising their civil status, but he himself did not have time to look after computerisation because he was too busy marrying people to one another. I do not know what you think, but as far as I am concerned, I believe that if, as manager, one does not take the time to take care of the future, one should delegate one's responsibilities and leave one's place to someone else; or, as the saying goes in our host country, 'to govern is to anticipate'. Thankfully, in the case of the Infostar system, civil-status managers understood what was at stake, and always kept their minds open and remained strongly invested in the project. I can even say that I have rarely seen anything like it, on such a scale.

## **3. Thoughts on the future of civil status**

For 25 years, my job has led me to be concerned mainly with optimizing the organisation of the administration and public services, and in this context, the same questions always come up:

- What is the optimal organisation?
- What is the best achievable organisation in these specific circumstances?, and
- How must the organisation be changed so that it will be better mastered in the future?

Following the experience I gained over the course of the whole period of conception and implementation of the Infostar system, I would like to make a few observations on the future of civil status, a subject I grew to know, respect, and like.

### **3.1 The future: technical elements**

There is a tendency to believe, given the remarkable developments in IT and telecommunications that we have seen, that the greatest changes are now behind us. I am convinced that this is not the case. I believe that the development of IT has only just begun, and that the greatest transformations are yet to come. Certain elements that remain completely unknown are likely to cause many more surprises. Moreover, the developments that have already taken place will still carry on, and will be strengthened and improved. Accordingly:

- In IT, distances no longer exist, so that it is no longer important whether the operational centre is located here, or nearby, or elsewhere, or anywhere in the world;
- Everything that can be accomplished - or that one wishes to accomplish - in IT can be accomplished anywhere in the world, or even on the moon;
- The amount of data processed in the case of civil status is always almost negligible compared to what it is possible to process with IT.

All this will transform the way IT is used. We are probably moving towards an industrialisation of IT - whereas today it is considered to be more of a handicraft - with the consequences of increased centralisation and virtualisation. The question of where the data and the software are located will no longer even be relevant.

### 3.2 The future: challenges and reckoning

*Certain tendencies, such as people's mobility and increasing migration, will have an influence on the work and the functioning of civil status, in such a manner that international relations, which are still exceptional, will increase and become increasingly normal situations. But as you are certainly more aware of these developments than I am, I would like to stick to a few remarks on a more specifically technical subject.*

*Whilst it is true that civil-status data are fundamental data on each person, it is also necessary to point out the basic missing link, which is the link with the biological person. With no biometric element, there is a missing connection to all the other data. And if we are already mentioning storage of biometric data - for instance, an identity photo, fingerprints, or even a genetic profile - I have to say that I would be reassured to know that this data is being stored in the care of the civil-status department, which handles each information request with the utmost care and discretion.*

### 3.3 The future: organisation

*If one considers its place in history, one notices that civil status was an essential part of the role of the State in the past, but that many other areas have been created or have grown, while civil status remained more or less the same. This is how it came to be that civil status is now such a tiny part of public administration that it may even be absorbed by another area. For this reason, and for reasons of material coherence, I am in agreement with the solution adopted in certain countries, who compile into one register, called the register of inhabitants, all civil-status records, records of foreigners, inhabitant monitoring records, and the identification papers database. The separation between those four elements mainly exists for historical reasons, or because of technical limitations that no longer exist today. If this unification was carried out at infrastructural level, this would not automatically imply the disappearance of civil status at the organisational and jurisdictional levels.*

*With respect to the client, other improvements should be made. The citizen should not be concerned with the structure of the administration, but any front office should be able to meet the demands of each person, and every service should have access to the data it needs.*

*In any case, despite globalisation and people's mobility, the aim should always be that each event need be recorded only once, and that updates then be carried out as automatically as possible. This objective might not always be attainable, especially when legal systems are too different, but this must nevertheless remain the ideal goal. The consequences, in terms of infrastructure, and for the architecture of the required exchanges, are a different matter.*

*And, while each country is researching how to implement successfully an optimal computerisation of civil status, we can also, nevertheless, think about the future stages of this process, and international interconnection. As far as I am concerned, I am looking forward with excitement to future developments in the field of civil status. I am sure that what awaits us will be very interesting, and I am convinced that we will not be short of work for a very long time.*