

## Information technology and public administration in Yugoslavia: the citizen's influence

Stevan Lilić assesses IT implementation in public administration against the background of economic and social reform and constitutional change

*The introduction of modern information processing technology has substantially modified most administrative processes, and the everyday tasks of administrative functionaries and employees are being transformed by new methods of decision making, information processing and services. The process of change within administrative production has significant consequences on relations between the average citizen and public administration, particularly in regard to the transformation of the administrative process from traditional authoritative interaction patterns, toward a service-oriented function as a (global) information processor. In these circumstances, it is argued in this paper that the many legal questions (e.g. personal data protection, privacy, etc.) reflect the complex contradictions of articulating public interests through administrative functions and the rights and liberties of the citizen. The implementation of information technology (information systems, administrative information, expert systems, knowledge bases, etc.) in public administration in Yugoslavia is assessed against the background of economic and social reform and constitutional changes.*

*Keywords: information technology, public administration, civil rights and liberties, economic and social reform*

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### INFORMATION TECHNOLOGY IN PUBLIC ADMINISTRATION

#### The information factor

Information has always been an important factor in governing public affairs. It is the image of files and records, of protocols and dossiers containing information on a particular matter or person that symbolizes government and public agencies at work<sup>1</sup>. In modern society, collecting, processing and transmitting information can be regarded as a principal public function of government and public agencies at all community levels. The task of government and public service can be seen as a general need to carry out administrative and social functions in an efficient, economic and legal manner. This view of public administration as a processor of recorded information can be illustrated with many examples from different areas of public activity — from tax collecting to population census statistics. The accumulated data is processed, transmitted and evaluated electronically by the mighty technological potential of the administrative systems of today's 'computer state'<sup>2</sup>. Within the public administration system, the answers to the many issues and questions put forward lie within the framework of new organizational methods and structures, as well as within the application of new information technology in the normative and legal suprastructure, particularly with regard to public administration functions and services.

Under the technological pressure the judicial, computing and administrative activities merge. Information technology related activities pervade many types of traditional legal public institutions and organs including the ministries of justice, courts or law enforcement agencies. It is clear that solving legal problems based on data processing application to government activities is impossible through traditional, isolated services of lawyers. Teamwork of specialists from different fields becomes common organizational practice. [Reference 3]

## Technology and administrative reform

Reform and modernization of public administration with regard to new technology is particularly present today, with many new approaches, methods, and processes<sup>4</sup>. The process is predominantly oriented towards the implementation of information processing technology<sup>5</sup>. Still, there are areas of difficulty — from material and normative limitations, to socio-psychological resistance and existing habits — that have to be taken into account<sup>6</sup>. Administrative processes are modified by the introduction of modern technology, particularly by information processing technology. The everyday tasks of administrative functionaries and employees are being transformed by new methods of decision-making, information processing and services<sup>7</sup>.

The introduction of new technology has three major organizational consequences: 1) information technology redefines the tasks of administrative agencies; 2) new information techniques balance the internal equilibrium of the administration; 3) modernization of the administration is the opportunity of the administration to modify its relations regarding service consumers. [Reference 8]

## EFFICIENCY PRIORITY

### Concept of efficiency

Efficiency can be viewed from different aspects and in different connotations — its main conceptual feature being dynamic complexity of notions and structure, stemming from the inherent 'more for less' quality of the concept. Linguistically speaking, efficiency (*efficiatis* in Latin, *efficance* in French, *Wirksamkeit* in German) relates to 'effects', 'results', 'successful results' etc. Technologically speaking, efficiency qualitatively determines a complex 'optimal' ratio between input and output values, where factors such as quality, time, cost, information, energy etc. are taken into account. Efficiency can relate to various states and conditions of both economic and legal systems. Economically speaking, efficiency is the best possible utilization of available resources, where available resources include material and human factors. Different economic systems utilize the available economic resources with different levels of efficiency<sup>9</sup>. Related to legal systems,

efficiency is organically and dynamically interrelated to the concept of legality<sup>10</sup>.

Efficiency as a legal concept is organically related to the principle of legality and represents its realization in the factual area of the legal order. The realization of efficiency contributes to the strengthening of the legality principle as the integrating factor of all elements of the legal system into a functional entity. [Reference 11]

### Convergency of economic and administrative systems

As modern industrial and social systems grow more complex, government regulatory and administrative functions increase. At the same time, the large governmental and administrative bureaucratic organizational systems become models for industrial enterprises and vice versa<sup>12</sup>. The lasting presence of data processing resources (hardware, software, communication technology) provide a potential vehicle of communication between basic economic subjects — from individual enterprises, small- and medium-size firms, to large national and multinational corporations and public services. The trend is continuous in the sense that it has no inherent boundaries, with effects that communication networks will serve many activities including production, commerce, administration, science, culture etc. Governments have been obliged by international competition to rethink all aspects of their economic activities and to review the service they provide, as well as to adapt to new social needs — they are obliged to invest and reorganize in order to reduce costs, particularly labour costs<sup>13</sup>.

Investment, achieving and redeploying increases in productivity and defining new activities are dependent on a widespread social consensus, and therefore on specific instruments of dialogue, whether in connection with activities of a commercial nature or activities that are not of a commercial nature... [Reference 14]

### Cost-efficiency of administrative systems

Public administration systems are subject to an enormous pressure of costs. Scarce financial means and increased service requirements present them with nearly unsolvable problems. Under these circumstances, the demand for rational and economic use of available resources is more urgent than ever. In contrast to private companies, public administration is unlikely to be able to sell the services it produces. On the contrary, public administration is usually obliged to deliver its services free of charge, and a market price of the services usually cannot be assumed. The employment of information technology refers both to the informational and organizational conditions of services, as well as the quality of services. The efficiency, cost and benefit of administrative production

is subject to change by the introduction of information technology as an additional means of production<sup>15</sup>.

Consequently, one of the priority tasks of contemporary public administration is the introduction of information technology and organizational models that would bring them as close as possible to the cost/benefit standard of economic efficiency. [Reference 16]

## CITIZENS AND ADMINISTRATIVE INFORMATIZATION

### Citizen's environment

In such social and administrative environments, most individuals usually leave a 'record trail' behind their actions in communicating with various government offices, public agencies and private institutions (birth certificates, school and medical records etc). Before the widespread use of computer information processing, collecting and linking particular bits of information into integrated patterns was technically very difficult, if not altogether impossible. Today, however, computer-based record systems and electronic communications networks make it possible to overcome the time and cost barriers. Computer information technology permits instant communication linkage — integrated data processing — of a large number of record systems (e.g. on individuals), literally in seconds<sup>17</sup>.

### Informatization of public administration

Through the introduction of information technology combined with telecommunication technology, the informatization of public administration is gradually developing around the knowledge base of collecting, handling, communicating and disseminating information within and by administrative and government authorities. Expert systems are being constructed having in mind the specific needs of public administration<sup>18</sup>. Local and large networks are in operation in which the technology and comparative advantage of personal computers are combined with telecommunication facilities. In this way, 'intelligence' is distributed widely throughout the organizational and procedural structure of the public administration<sup>19</sup>.

Departments, as part of public agencies, will gain in autonomy, as far as their operational activities are concerned. Flows of information, which are being processed parallel to the operational activities, are constantly at hand for the different levels in the departments. (...) The job of the street level bureaucrat will certainly become more interesting, as the horizontal span of his tasks will increase and the variation of his case-load will grow. (...) On the other hand, it has become much easier for his superiors, to monitor his activities. (...) At first the loss of discretionary power of the street level bureaucrat may be seen as negative for the official, but as a benefit for the citizen. The citizen's 'equality before the law' seems to be improved by the use of computer programs. [Reference 20]

### The 'citizen-public administration interface'

The informatization process has significant consequences on the relation between the citizen and public administration. The relation with the citizen, i.e. the 'citizen-public administration interface', is in focus, particularly in its transformation from traditional relations of an authoritative nature towards a high-technology, service-oriented role of the public administration as a global information processor. Within this context, many legal questions (e.g. personal data protection, privacy, etc.) reflect the contradictions of the realization of the administrative public interest and the rights and liberties of the citizen.

At first sight, the objectivity of computer-systems seems to further the equality before the law between the citizens, because they put aside human judgement for a great part. In general this may be the case. Nevertheless, grave dangers are present. (The above mentioned) 'change of semantics' may have a negative effect on the bureaucratic competence that will be required from the citizen. Many citizens are not aware of the consequences the application of computers may have on the consideration of their case. Not only the legal security, but also the equality before the law may be struck at its roots. [Reference 21]

## CITIZEN'S INFLUENCE: REFLECTIONS ON THE YUGOSLAV CASE

### Economic and social developments in Yugoslavia

Strategic questions of economic, technological, scientific and administrative development are priority issues in many countries in the mid and late 80s, Yugoslavia included. Not only are these topics considered and discussed in professional and academic circles, but at the highest instances of government as well. Economic and social developments in Yugoslavia during the past several years have been dynamic and complex — unsatisfactory both when viewed against official expectations and in comparison with other countries.

The general trend of declining real earnings, downward surge of real investments, strong import demands and, particularly the galloping inflation rate, have marked the recent economic developments of this country. At the same time, a number of measures undertaken by the government (e.g. price freezes) to bring inflation under control and improve the balance of payments have not given efficient results. [Reference 22]

### Official assessments

The strategy of Yugoslavia's technological development, adopted by the Assembly of Yugoslavia, particularly stresses:

Yugoslavia's current development lag in relation to countries of similar size and similar potentials in the field of science and technology must be overcome. (...) The basic orientation of Yugoslavia's technological development strategy must be to raise the technological levels in all fields, especially in production activities and social affairs, through breakthroughs in informatics, biotechnology, new materials... (...) Due to disintegrating economic trends in the past period, public capital and certain technological systems have been fragmented to such a degree, that many no longer represent reliable economic and technological factors. [Reference 23]

## Expert views

In professional and scientific research related to the general situation in Yugoslavia, it is frequently pointed out that among other causes, there is serious disproportion between constitutional and legislative normativity on the one hand and real social processes on the other. This reflects on many aspects of general social life, particularly on the efficiency of the economy and the administrative system, where the gaps between the legal framework and reality are the most evident. The 'hyper-production' of laws and regulations in the economy are frequently in mutual contradiction to the extent that some experts argue that it is a real wonder that, for example, the economy is functioning at all<sup>24</sup>. The same could be said of the normative and organizational structure of the administrative system. The position of the public administration in Yugoslavia at this moment must be viewed in relation to the existing economic and social situation, as well as the rather complex process of constitutional change<sup>25</sup>. This was explicitly stressed in the Report of The Federal Government (and The Federal Ministry for Administration) on the state of the administration system, as well as in expert opinions of The Federal Expert Commission on Public Administration<sup>26</sup>.

The Expert Commission holds that fundamental critical re-examination of the basic normative orientations on which the position and role of the state administration, as part of the political system of socialist self-management, should be initiated without delay, in order to define solutions in due time, and to incorporate them into the text of the constitutional amendments. [Reference 27]

## Negative tendencies

In an extensive and in-depth study of the administrative system in Yugoslavia (namely Croatia), the highly qualified research team (headed by academician, E. Pusić) with regard to the citizen's influence, concludes:

The citizens assess their influence generally as non-existent. Still, the percentage of the ones that would prefer to have influence does not exceed 40% in regard to schools, and 30% in regard to medical care. [Reference 28]

## Administrative procedure

Very illustrative negative tendencies regarding the citizen-public administration interface in Yugoslavia can be seen through the normative structure of the administrative procedure. Even though the General Administrative Procedure Act is reputed to be of a considerable legal and technical standard, there is a formidable 'normativity gap' regarding the citizen-administration relation. It has been very successfully argued that measures should be taken to modernize and introduce new technology into this procedure, as the existing 'technology' cannot secure the effective implementation of the proclaimed constitutional and administrative 'Principle of efficiency in the realization of rights, duties and legal interests of citizens and other parties' (Article 6)<sup>29</sup>.

The government should put under critical analysis all the norms of the administrative procedure, from the point of introducing modern technologies. The novelization would go through two stages. In the first stage, the traditional procedure rules would remain, and new ones would be introduced where possible. The second stage would gradually relieve the traditional regulations and deal with the new problems stemming from the application of contemporary technology. [Reference 30]

## Citizens as data subjects

Questions relating to the citizen-public administration interface have also emerged in the context of data processing by public administration agencies. Generally speaking, the citizen is in the position of being the data subject, but only from the point of view of the obligation of the citizen to give data<sup>31</sup>.

The analysis of the positive laws regarding the government data bases shows, above all, the explicit obligation of the citizen and other subjects to furnish correct and complete data for realizing the public interest, while the question of specific legal protection is not explicitly regulated. [Reference 32]

## CONCLUDING REMARKS

As a consequence, the 'normativity gap' in the reality of Yugoslavia is very strongly expressed not only in the economic, but also in the administrative system. Economic inflation is paralleled by a normative inflation, and estimates put the number of general acts (laws, regulations, 'self-management acts') at nearly 4 million! Implementation of information technology (information systems, administrative informatization, expert systems, knowledge bases, etc.) in public administration in Yugoslavia will have to wait for the resolution of preliminary problems; namely, economic reform, social reform and constitutional changes. Only in these circumstances can 'normativity turn into reality', and the citizen have benefit of such mandatory

'abstract' clauses (e.g. of the Administration Systems Act), as the one that prescribes that:

The executive organs and the administrative agencies base their proposals, opinions, regulations and other acts they prepare (...) on scientific and professional knowledge... [Reference 33]

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