

Policy Issues Affecting Spatial Data Infrastructure Developments in the Netherlands

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Abstract

Access to and availability of government data is still a hot item in the Netherlands. The Minister for Urban policies and minorities promotes the open access concept. This open or free access to government information may have huge consequences for the geo-information mills who have been forced in the 80s to be self sufficient by working on a cost-recovery basis. Ravi took action to challenge producers to post their public data for free on Internet. The Secretary asked Ravi to advise him on how to guarantee the good quality of public core datasets in the future and identifying financial mechanisms to maintain quality.

In 1998, the Dutch government presented a very ambitious e-government program for the coming years. The quality of public data and the maintenance of these data are crucial for a good functioning Dutch government in the future. The NGII developed by Ravi in cooperation with producers and users play an important role in the creating of authentic registers in the Netherlands. Geographic information is very important in most activities. The authentic registration approach is the back-bone for the creation of public electronic kiosks and web access to government information and services.

Introduction

The digital era has (had) significant impact on the way we do business. Partly because of the fast development of information technology and the increasing availability of electronic data, the Netherlands seem to be on the threshold of a "dramatic policy review as far as the accessibility of government geo-information data is concerned" (De Jong 1998).

Information technology also enables government to disseminate data in an inexpensive way and to bring services closer to citizens and businesses. These opportunities are recognized by the national government in the program Electronic government. It aims to use information technology as much as possible in order to execute its public tasks as effective and efficient as possible. This report will provide the legal setting in which the access to government information discussion takes place and will discuss the electronic government program with regard to geographic information. First we start with some background information on the Netherlands.

Background information

The Netherlands covers 41.000 square kilometers, with a population of about 15.9 million. The population density is 420 people per square kilometer. The Dutch GDP is roughly \$ 283B. The economic growth is almost 4%. According to the IDC/ World Times Information Society Index 2000, it is one of the most developed countries in the world wide information society (seventh). There are five million mobile telephones (2000), and about 50 percent of the population use the Internet, a number that is growing fast.

NSDI building blocks

The responsibility of the collection, utilization and supply of core geographic information is, for most geographic information, in centralized government agencies. The Cadaster is responsible for the cadastral data, the National Mapping Agency (Topografische dienst) for the topographical data, for statistical data the CBS is responsible, and also the Large Scale Base Map of the Netherlands may be put in this place. Building information, and the maintenance of the population registers is a task of the municipalities. The local chambers of commerce maintains the corporate entity register.

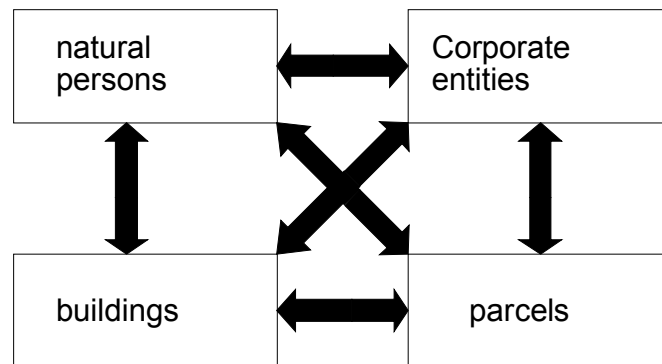
Ravi developed the national structure plan for geo information, approved by the Dutch Council of Ministers in 1992. The main target of this vision was to increase the compatibility and exchange between the main core data sets. Between 1993 and 1996 this infrastructure has been grown into a national geo information infrastructure.

The national geographic information infrastructure (NGII) and e-government processes are based on the concept of core data – data that most people and organizations need in solving problems. This core data concept is similar to the FGDC's Framework Data Concept.

In the 'Structure Outline for Geo-information' (SVI, 1992) the information concerning parcels of land, people, companies and buildings, have been identified as the fundamental to build the NSDI.

The following fundamental administrative data sets have been realized:

- Parcels of land in the Cadaster (100% digital). The electronic exchange of public information between the cadaster register, the population register and the register of enterprises is based on the recommendations laid down in the Ravi structure plan.
- Natural persons in the Automated Municipal Population Records (GBA 100% digital)
- Companies in the Chambers of Commerce registers (Handelsregister 100% digital)



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The fundamental data set for buildings has partially been developed in a tax-law for the assessment of real estate and will be further developed. Two nation wide fundamental geometric/topographic data sets are:

- Large Scale Base Map of the Netherlands, a 1:1000 base map (GBKN, 100% digital). This data set is financed by all the Dutch municipalities, the Dutch Cadaster and the joint Dutch utility companies and Dutch telecom. The production costs amounts to \$ 400 million US dollars.
- Top 10-Vector data set, a 1:10.000 core database made by the Ordnance Survey (TDN; 100% digital) The small scale topographic data set will be set up in cooperation with the joint departments and will be used for decision making purposes. The main users agreed

on this approach. Ravi estimated a benefit for government in avoiding double collection of data for a total amount of US\$ 23 million and US\$3 million keeping this data set up to date.

Some of the relationships between these fundamental data sets have been realized, while others are subject to study (see under electronic government).

Core datasets established:

- Cadastre (administrative and 1:1000 cadastral map)
- Population
- Enterprises
- 1:1K topographic (urban)
- 1:2K topographic
- 1:10K topographic
- Elevation
- Geological
- Street Address

The extent to which these fundamental datasets may be used depends on the applicability of legislation restricting or enabling the use of the data. Copyright, database legislation, and privacy legislation restrict the use of the data. Open access laws like the government information act promotes the use.

Copyright and database legislation

Copyright

Copyright in the Netherlands can be imposed when a work is original and shows the personal view of the creator of that work (oorspronkelijkheidsvereiste). The copyright act doesn't make a distinction between private parties or government: both may impose copyright on their information. The only condition is that the government has to reserve the right specifically and a copyright sign (©) has to be placed on the work. Many government producers of geographic data sets indeed do impose copyright on their data. Copyright extends for the life of the author plus 70 years or 70 years for corporate created works.

Copyrights and geo-information

Due to their factual and standardized character geographic information often does not meet the requirements of originality, required by copyright. However, common law shows that geo-information with a personal view can be protected by copyright. This is for example true for topographical maps: the generalization, use of colours and symbols may represent a personal view of how the data is represented on a map. In the Netherlands about 80% of all public sector data sets is used by other public sector bodies. In 70% of the public data copyright is reserved (This does not implicate anything about prices).

Database legislation

In 1999 the Dutch parliament enacted the European Directive for the Legal Protection of Databases (<http://europe.eu.int/eur-lex/en> search 96/9/EC) into national legislation. The new law protects the producer of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database. The law can be described to protect 'sweat of the brow', to protect invested time, money and effort. The law grants the producer two rights. He has the right to grant permission both for downloading,

printing and copying (parts of) the data set as well as for making a data set available to the public by dissemination, renting, online transmission etc. The new law offers protection for 15 years, but every time the database is updated, a new 15 years start. The new law does not exclude government agencies from imposing this right. Government however, has to explicitly reserve the right.

The geo-information sector has eagerly looked forward to the implementation of this directive.

Privacy

The European Directive on Privacy Protection (PbEG L281, 23 november 1995) is of great importance for the use of geo-information. The directive restricts the use of data on natural persons. Although geographic data primarily focuses on objects and not on natural persons (subjects), and even might be presented in an anonymous way, an operator can often easily relate these data to natural persons. This is due to the use of land identifiers (address or cadastral identification code). In most cases the law concerning privacy protection is therefore applicable to geo-information. As a guideline the Dutch parliament decided that if data is important for the way a natural person is treated in daily life it has to be considered data on natural persons and therefor the new law applies to that data. Although the criteria might be ambiguous for some geographic data (e.g. area of a parcel), the law does apply for ownership data and data presenting the value of geo-information (e.g. taxation information). The Dutch Registration chamber has decided that data on zip-code level (6ppc) is not considered data on natural persons.

When the law applies to a database then the purpose of data collection and further use of the data have to be specified. The purpose should already be defined at the start of the data collection and it should be enforced during each step of future processing until the moment the data are destroyed. This requirement could cause various difficulties for the geo-information sector, since one of the main targets of the geo- information infrastructure over the last decade has been to develop basic data sets, aiming at multipurpose use and exchangeability of data. The way the new statutory law on privacy protection will influence the various sectors in society, like the geo-information sector, however is yet unclear. In any case the new law - unlike the present law - does no longer make a difference between government and private organizations. Furthermore it no longer creates legal exemptions for certain law based data sets like the registers at the Cadaster (De Jong 1998).

The new law is expected to become effective by the end of 2001.

Access to government information

At this moment (2001) the government anticipates on the following categories of government data:

1. Legal documents, policy decisions and jurisprudence. These data are excluded from copyright and the database legislation and may be freely accessed through (www.overheid.nl).
2. Information subject to the Government information act
3. Other information (electronic databases) within government

Information subject to the Government information act

The main objective of the Government information act is to promote the participation of citizens in the democratic process. The law provides for access to information that crucial in the decision making process of the Administration. It concerns data related to administrative affairs, i.e. data used in the policy making process, including the preparation of policy, the actual policy document and the data needed to execute the policy. Data concerning the national security, and the security of the Crown, among others, cannot be requested under the Government information act. The price to be paid for GIA information is based on the cost of dissemination; 10 cents per copy.

Other information within government

This last category includes the commercially most interesting data: the electronic geographic data. Since this data is used only partially in most administrative affairs it is reasoned that it cannot be obtained through a Government information act request. For this reason the answer to "May a private citizen or business acquire an entire geographic dataset produced by a Dutch government agency?" is typically no. Government agencies can claim copyright or database right in their data and most of them do so and citizens or business cannot access entire databases because, according to current interpretation, the Government information act does not apply to complete databases.

In 2000 the commission 'Constitutional rights in the digital era' (commissie Franken: Grondrechten in het digitale tijdperk) recommended to change the goal of the Government information act from 'controlling government' into 'the public right to access government information'. Government information has become vital for citizens in daily life: citizens should have the right to access (paper or electronic) public data. Some exemptions may be made by law, for example for reasons of privacy.

The parliament agreed with this new perspective "the more people use information, the higher its value for society". The constitution needs to be changed to introduce this recommendation.

Commercialization of government data

The memorandum 'Towards accessibility of government information' by the Ministry of the Interior in June 1997 really started the discussion on this theme in the Netherlands. Until then the easy accessibility of government data sets for the business community was hardly a point of structured discussion within the geo-information sector. The memorandum attracted increasing attention because of the explicit elaboration on the Report of the Commission Cohen 'Market and Government'. This report, aiming at open markets and deregulation, was presented by the Ministry of Economic Affairs earlier that year. The report stated that in general activities of governmental bodies oriented towards the market should be terminated. Governmental bodies should restrict themselves to their public tasks. Following this proposed basic policy the Ministry of Interior formulated its goals for greater accessibility of governmental electronic data sets for the benefit of the business community. It was expected that in so doing the development of new information products as well as the economic growth, would be stimulated. Other political decisions followed. The current situation may be summarized as follows:

- Government agencies must execute their public task and collect data when this is necessary to fulfil this task.
- Government agencies should not perform activities that can be performed by the private sector. An exemption exist when this 'market' activity is considered to be a public task. If government agencies compete with private parties, this must be on an equal and fair basis: equal access and availability to the core datasets for all competitors, including the own organisation.
- When the private sector cannot or does not want to add value to a public data set that will be of great importance for society, the responsible Minister may decide that a government agency may add value to the core dataset in order to make it better accessible.

Pricing

The discussion concerning the provision of information and possible commercialization has started in 1997 with the memorandum "Towards accessibility of Government information" and is ongoing.

Since the mid 80's cost recovery has been the leading principle applicable to data supply by Dutch government bodies to third parties (De Jong). In the public sector a general tendency towards self-financing and thus cost-recovery has becoming evident. Therefore legislation

has been drawn up, for example the Land Registry Act, which states that the Cadaster must be totally cost recovering. While the National mapping agency (TDN) has to recover the costs for 50%.

Traditionally in Europe, access to geo information and other data is typically under a cost recovery pricing scheme. However, the Netherlands is advancing policy to reduce or eliminate pricing for data, deemed essential for broad public use. On April the 20th the Secretary of Interior presented new guidelines on the access of public sector information in the Netherlands. These Guidelines have not been approved yet by the Dutch Parliament. This memo "Towards Optimal Availability of Government Information" promotes the availability of government information by stating that all government information should be disseminated at a maximum of the cost of dissemination. A new Act will be prepared to optimize the use of this information for citizens and to decrease limitations for further use. Government information with its own pricing mechanisms, like cadastral information, is not subject to the new guidelines. The new policy also does not apply to data sets for which the new policy line would result in financial problems for the supplier of the data, like the data sets of the National Mapping Agency (Topografische Dienst), and some data sets of municipalities (taxation data). In this respect, the Ravi suggested to allow the GI-sector itself to facilitate access to geographic data prior to a formal arrangement (law). A recommendation of self-regulation for the GI-sector which was welcomed by the Minister.

The proposal has not come with complete agreement by all geo-producers. Some fear that other sources of financing maintenance will not be found, therefore reducing data quality, consistency and service provision. Ravi presented an action plan in a Ravi workshop in May to set up recommendations on how the quality of existing core data can be maintained and which data sets can be provided on Internet being freely available without additional costs.

However, experts in the RAVI Business Platform have reported that by reducing the price of key data, the private sector will be more than compensated through the creation of new markets opened by increased access to free data.

The Secretary of the Interior has asked Ravi to conduct a complete inventory of geodata, with recommendations as to the data sets are to be free or for cost of distribution. Ravi is also looking at alternative financing options to assure data maintenance. Ravi will also assure that free data is posted to the national clearinghouse for access by the community. Finally, as mentioned before, Ravi will continue to work with the community to identify any additional data sets deemed to be "core".

Liability and resale¹

Liability

Research by the Ravi showed that practically all the organizations interviewed decline to accept any form of liability, including liability for damage arising from faults in the data set, as well as damage that has been caused by wrongful use. This indemnity from liability is explicitly laid down in supply contracts. Statistics Netherlands accepts liability for faults in the data supplied. This applies also to the Cadaster in the case of legal tasks. The liability has been regulated by law in the case of the Cadaster.

Resale

The same research showed that if GI data sets are supplied by government to third parties, without exception, resale is forbidden in the supply contract. In this case, the copyright of the supplier will be invoked. What is more, in general, the data set is not sold outright but the user is licensed to use it. In the contract this use is often limited to a certain task, a certain project or to use within an organization. When making the data sets available, Statistics Netherlands imposes no restrictions on their resale but, in such cases, a clause, which regulates the royalties, is included in the contract.

¹ This part is extracted from Berends, 1998

There are two reasons for the restrictions on resale. The first reason is concerned with business economics. When a supplier sells data sets and a customer provides, free of charge, or resells that set, this limits the market for the original supplier. In the second case, one wishes to keep a grip on the use of one's own data sets, the supplier wants to prevent improper use or, for example, prevent the use of his data sets for objectives that are not in the interest of his organization.

Results of access policies on pricing and availability of geographic data

The overview above shows that the lack of consistent national guidelines of pricing and/ or availability of government information has resulted in pricing and access policies, varying from one government agency to another. Some organizations do not vary prices per client in principal, e.g. Statistics Netherlands (as rule only charges the costs of distribution to clients) and the DLO Staring center for the products Land cover database of the Netherlands and the Land cover ecological database of the Netherlands. Other organizations supply data sets to governmental bodies free of charge or at the most for the cost of supply, e.g. the provinces. Sometimes customer categories are being discriminated that receive data sets for a reduced price (i.e.: Partners, Customers within the same ministry, Training, Libraries and universities). Provinces vary their price policies per client and use, varying from free distribution, the cost of the medium and, up to and including, charging for part of the initial costs of the information production.

The availability of GI data sets and their limitations²

Only a minority of organizations offers all their GI data sets, with or without charge, to third parties, e.g. the Cadaster, DLO-DC and several provinces. Government GI data sets are not always, by definition, available to third parties.

In the first place, this can be the policy of the administrator. A number of respondents has indicated that some managers would rather reserve data sets for internal use and not make them available to third parties. In a number of cases, organizations are extremely reluctant to supply data sets. The external use of data sets can be inconvenient and threatening, 'inconvenient' for instance regarding the work and the after-sales responsibilities that selling data sets can entail. The external use of data sets is regarded as being potentially 'threatening' if the information is used for political decision-making or for 'checking up' on the policy of government bodies.

Secondly, the availability of data sets can be limited because the original producers of the data set, or parts of it, have forbidden this. In this case, the source controller has based his argument on copyright and a ban on resale is included in the contract. Sometimes there is no ban on resale, but there is no resale in order not to spoil the good relationships with a data supplier (mentioned by the Survey Department of the Department of Public Works).

In the third place, secrecy can limit the supply of GI data sets. VROM has secret data sets containing information concerning offences against the environment. Also fiscal information in the framework of the Valuation of Real Estate Act (WOZ), is secret. In a number of cases, micro- data, in connection with the protection of privacy or company interests, is not made available.

Examples of this are, company data in possession of Statistics Netherlands, data about agricultural companies registered by DLG Service for Land and Water Management, data from the Emission Registration of DGM and land exploitation data from the local authorities. However in a number of cases, with a view to the Government Information Act (WOB), this data is accessible.

Finally, the availability can be limited because the supply of data would not be in the interests of the organization in question. For example, an insight into the data concerning the acquisition of land by the local authority could lead to undesirable speculation.

² This part is extracted from Berends, 1998

Some findings of a survey performed by the State Secretary of Interior Affairs on the nature, number and use made of public sector data (Proceedings Seminar 'Free accessibility of GI in the Netherlands, the United States and the European Community', 2 October 1998):

- Approximately half of the files are used by other parties.
- 80% of that use is by other public sector bodies.
- Copyright is reserved on files provided to third parties in 70% of those cases.
- In all cases, care is taken to ensure protection of data relation to personal privacy.
- More than 70% of the files made available are provided free of charge. The remaining
- 30% are charged, sometimes in part and sometimes in full.
- When files are provided, conditions for use are set in 60% of the cases. These conditions are mostly concerned with internal use and restrictions to ensure that data is used only for the aim the data set has been collected for.

Mechanics of access

Technically access to the data sets is being provided among others through the establishment of National Clearinghouse Geo-information (NCGI), an electronic metadata information desk. The clearinghouse provides a means for finding available data set, public and private, via the Internet. At the moment the NCGI provides only metadata, free of charge, contained in a central database. The data sets themselves are contained at the owning organization, being among others government agencies, provincial and local authorities.

Organizationally spatial data are being made available through cooperation between parties within the Ravi by coming to agreements and consensus on how to make the data sets available.

NCGI was financed until 2000 by its founding members, the Ravi and the Ministry of Housing, Spatial Planning and Environment. Between 1997 and the year 2000 1.5 million ECU - not including costs for metadata and conversion - have been invested in the project. In general its participating parties and the Ministry of Housing Spatial Planning and Environment are funding the Ravi and its activities with 1 million ECU each year in scope of:

- Standardization of GI
- Legal aspects and arrangements
- Toning data sets and establishing relationships between the fundamental data sets
- Raising political awareness
- Further developing the Knowledge Infrastructure

It is likely that in 2001 the NCGI becomes part of the private entity Geodan IT due to a lack of participants willing to contribute to the NCGI.

Electronic government

In 1998, the Ministry of Interior proposed an E-Government Action Program for the nation. The program was approved by the Parliament for implementation government-wide. This enabled the Netherlands council for geo-information (Ravi) to play a central role in the development of e-government. In the Netherlands public sector spends yearly approximately \$ 4 B US dollars on ICT. ICT turnover of private sector software houses amounts to \$ 15 B US dollars.

The major points of the program are:

- An accessible digital government which will result in better access to government data and services, and the creation of interactive and proactive services – not just access to information. Accessibility to government information was improved after the introduction of a new government web site (<http://www.overheid.nl>). Information is located at one single central access point or portal, using a simple search engine. Parliamentary documents, as well as legislation and regulations published are free of charge available on the Internet, creating a simplification of citizen access to services and information.

- the organization of the infrastructure behind the portals and the service desks. The streamlining program for core data in the Netherlands is an important tool to come to the most efficient collection and use of core data. A clear division of tasks between public organizations, based on agreement has to be made who is collecting data to avoid duplication of effort. Essential in this process is the establishment of a system of authentic public registers. The impact of this approach is the simplification of administrative procedures for government, citizens, and businesses, e.g. by making use of pre-completed forms, the reduction of administrative costs. The NGII is an important instrument for realizing the streamlining programs and larger Knowledge Infrastructure. The Ravi stimulates also the use of modern geographical ICT and of data acquisition and presentation techniques to designers, policy-makers, and citizens for the benefit of major infrastructure projects such as the expansion of the Port of Rotterdam and Schiphol Airport aimed at enhancing the national knowledge information infrastructure.

- More effective and efficient government services. Government services will be improved by taking a proactive approach, whereby the government provided needed services on its own initiative. ICT offers many tools enabling effective and efficient government. Examples in the geo information sector are the services for people who receive national assistance for their potential rights to individual housing, exemptions from legal authority taxes on real estate.

- A framework of authentic data registers that are certified by the government. The introduction of these authentic registers is an essential condition for reliable and optimized quality of government information provision. Guaranteed quality of the public data is necessary and the exchange of information should maintain the personal confidentiality of the data. Certification procedures such as the implementation of Third Trusted Parties (an organization dedicated to validating commerce transactions) for the public key infrastructure, the authenticity procedures of current core data of the NGII and the setting up of the Privacy Enhancing Technologies (PET's) are crucial in this process.

Three major E-government initiatives are:

- Public counter 2000
- Electronic service Desks
- Authentic registers

Public counter 2000

A special bureau was created by the Dutch government in 1996 to initiate the integration of the public services from the perspective of the citizen instead of the mission of the organization, and for using the Internet as the new way of communication between the front desk and the back office. That approach needs the standardization of the internal procedures, such as a standardized description of demand patterns, a catalogue of matching products and services, interactive forms, and a model integrated website.

The major emphasis of Public Counter 2000 is the focus on customer demand patterns. Examples of citizen demands include: moving to a new town, starting a business, building a house, finding a home for senior citizens, and so on. To do this effectively, this requires the integration of many separate government services, the separation of front and back office. Of course this exercise needs a broad approach, crossing the boundaries of public organizations. This leads to the introduction of physical and virtual counters and pro-active services. All libraries will have digital access at the end of this year (2001).

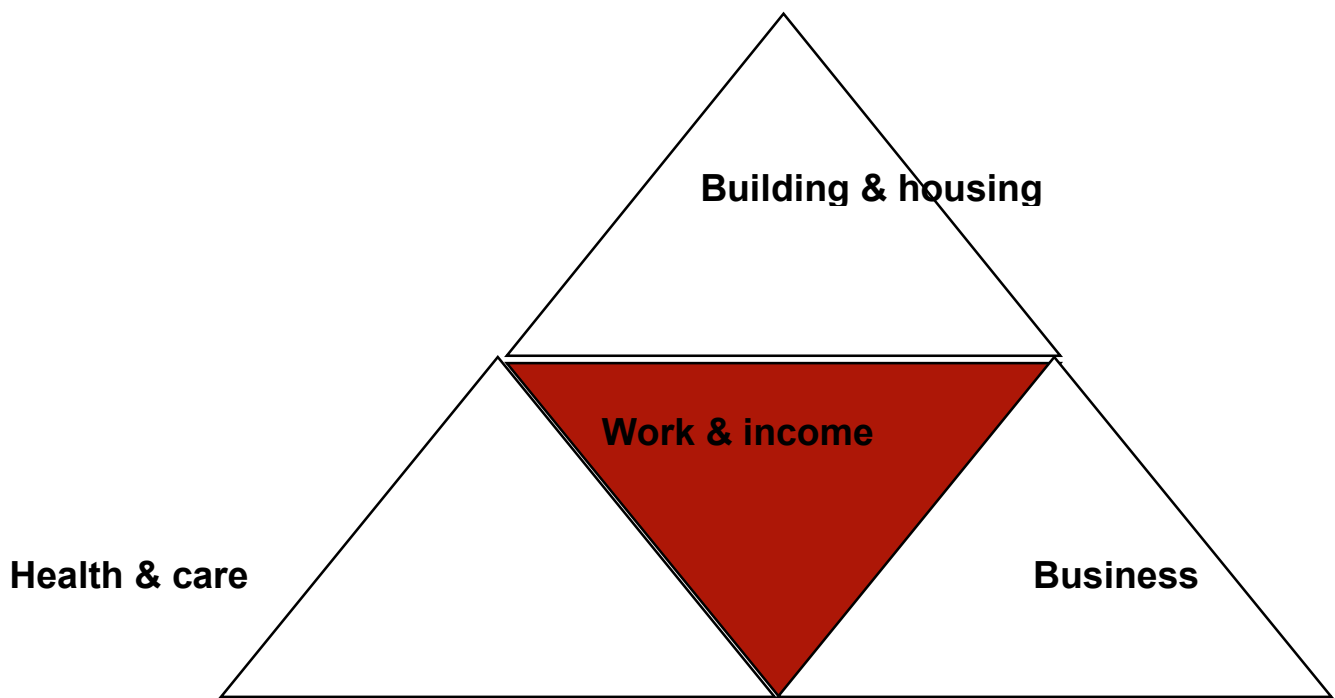


Fig: Public counter 2000: towards full electronic service desks

At this moment the services of municipalities can be characterized as fragmented. The citizen who needs a service has to integrate the information and product he gets from his city or province. In the integrated public counter, the back office is separated from front office and by use of knowledge management systems and Client Follow System the front office can deliver services.

The first three years (1996-1999) the pilot phase of this program was designed to find out in practice whether the idea of a single counter was feasible. On an experimental basis, physical and virtual counters were introduced in 15 municipalities, in three areas in the domain of real estate, services for handicapped and elderly, moving to a new town.

The organization of IT in the public counter is a major element of achieving the right level of success. The main municipalities participated. The projects didn't provide services of national government agencies or ministries. The lack of a consistent overall legal system was considered as a big impediment. The electronic government policy of 1998 further accelerated up the process.

Goals of E-government program for 1999-2002:

- Access to public information: 100% electronic
- Portal site www.overheid.nl
- Public service delivery: 25% electronic
- Implement 4 integrated counters
- Redesign government backoffice (basic registers, chipcards, change in legislation)

The target for 2002 is getting one hundred percent access to public information electronically. Electronic service delivery in the Netherlands is already manifest in the Dutch banking and insurance branch. About 30% of the annual income tax-forms are filled in electronically and vehicle-tax-registration can also be done on-line. At this moment parliament is discussing the introduction of the electronic decision. Also the Cadaster Act will be changed to allow the electronic delivery of a copy of the notarial deed (a legal document) to the Cadaster.

In 1999 the Dutch government has opened a one portal-website, which offers access to all levels of departments, administrations, municipalities, provinces, agencies and other public institutions. At the same time a helpdesk was installed to guide and help government organizations to build full-sized websites. The implementation of integrated service counters is an important action.

The Dutch government presented in his 1998 E-government action plan three pilot counters. These counters will be developed on an operational basis. A counter for buildings and housing counter for enterprises, a so called business counter, and a health and welfare counter. At the same time a fourth counter is under construction: a work and income counter. However, our goal is for a much more robust set of services through Electronic Service Desks available through kiosks and on the worldwide web.

In summary, the Public Counter 2000 program helped us move forward toward greater customer satisfaction with government services. The 'one stop' focus of this project helped citizens obtain government services in one step, not through a series of requests through different organizations in a pro-active way.

Electronic service desks

The electronic service desk program will fully implement e-government in the Netherlands. The effort began a few years ago by providing citizens access to over 1,000 organizations through a single Worldwide Web portal. The main objectives are summarized as follows:

- National information available on the internet (www.overheid.nl)
- 97% municipalities developing electronic desks
- 2001: all municipalities on the internet (i.e. having a website)
- 2002: 25% of government services digital
- 2003: Remote voting capability (pilot)
- 2003: General government services on line

Government will adopt procedures and rules of conduct in 2000 to guarantee the reliability of personal data.

The Dutch government will establish procedures

- to implement ICT programs in government organizations
- to certify organizational consultants and ICT companies which will follow the Counter 2000 approach
- monitoring the process made in providing electronic services

Government starts with ICT supported decision-making and produces guidelines on participative decision-making. \$ 10 million US are available for the remote voting project for the election of 2003.

Geo-information services

In practice the geo-information sector is far ahead, providing a public geo information desk as a part of the Dutch e government program.

For the housing and building counter, integrated services will be delivered from the Dutch cadaster registers in combination with the delivery of building permits and other public provincial and municipal limitations on zoning and construction by municipalities. Ravi set up a legal system for this approach and a Bill is in preparation. This counter has been set up in cooperation with the Department of Housing, the Dutch Cadaster, the Municipalities, the Dutch Building Societies, Brokers and Dutch Notaries.

The service level of the counter will be increased in a period of three years, from an information status to an transaction status in 2002

This counter gives also an overview of the possibilities on subsidies for citizens for renting houses by the Department of Housing.

A second successful approach is the counter of businesses, which will decrease the administrative burden of businesses to meet customer needs. In 2002, all enterprises in the

Netherlands will be ready to communicate electronically with tax authorities, social security, the insurance sector, the chambers of commerce for starting a new business and to make transactions (Businesses must register with the Chamber of Commerce in the Netherlands to start a business). In 2003, all major services provided by Dutch organizations will be provided on-line.

Authentic Registers: key component of E-government

While the core geographic data identified by the Ravi is recognized to be of vital importance for many different operations in the Netherlands, we have taken additional measures to assure the quality, consistency and currency of data for several critical data sets. We do this through Authentic Registers (see under electronic government).

An important part of the Action program for Electronic Government was the streamlining core data set program and the introduction of authentic registers.

The Dutch model for Authentic Registers is simple: government guarantees the creation and maintenance of data for use by many organizations. The data is regulated, certified as accurate and current, and the producer assumes all liability for its use by others. This approach requires continuous funding commitments to finance maintenance. Each Authentic Register is assigned to a “responsible” ministry for maintenance and improvement.

So it is a register with very high quality data with a guarantee on continuity and maintenance of data. Every government agency is obligated to use Authentic Registers.

Authentic registers are introduced for the improvement of the quality in the decision-making process and for effective administration. Another target is the reduction of the administrative costs of enterprises and individuals by using pre-completed forms such as subsidy applications and tax levies. Another benefit of authentic registers is lowering fraud. The Dutch government initiated an Authentic register of social subsidies tied to the tax Department of Finance data bases.

We believe that this is one very significant difference between the Netherlands and other nations in terms of the way we create and maintain data. In the Netherlands, key data is guaranteed by the government as being accurate and fit for use. From the start, we put in place the funding to maintain the data, to address user ideas and concerns, and to certify the data. Finally, liability is assumed by the producer.

Authentic registers:

- High quality information
- Maintained accuracy and currency
- Multiple use
- Regulated and Certified by the Government
- Producer assumes liability
- Clear financing mechanism
- Process for User involvement
- Responsible Minister

The way forward

RAVI has recommended that more core data become Authentic to increase the availability of accurate and consistent data for government and public services. Core data defined by RAVI

for the NGII, which will likely become Authentic Registers in the near future are cadastral data, elevation data, geologic data, and the large scale geospatial dataset (GBKN).

Recently the Department of Roads and Water management, the Joint provinces and the Association of Waterboards developed through Ravi a core dataset on elevation data, based on Dutch Remote Sensing.

The Dutch Geological Survey will present his essential core data soon. This institute is a modern knowledge based organization, named TNO Delft. The Executive Board of this organization is interested in the exchange of experiences in the US with the FOIA in practice.

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Programma stroomlijning