



FEDERAL MINISTRY OF JUSTICE
LEGAL INFORMATICS DEPARTMENT, PR 5

IT strategy of the Austrian Justice System

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1.3 For the reader in a hurry

The reader in a hurry is recommended to refer to sections

- 1.4 Introduction
- 2.1 The goals and responsibilities of the Austrian justice system
- 2.3 Goals of legal informatics within the justice system
- 3 Principles.

1.4 Introduction

Wherever this document uses only male or female personal pronouns, this is only in the interests of rendering the text more readily comprehensible. Under no circumstances is there any intention to discriminate against females or males; all such references should be deemed to apply to both genders equally.

1.4.1 On the situation of legal informatics within the justice system

The use of IT within the Austrian justice system is well developed and widespread. Successful IT solutions such as court automation, database on decrees, Commercial Register, Land Register, integrated penal system administration, advances of support and collection of payments due to the justice system and the electronic legal filing process support thousands of users in handling millions of transactions each year.

The Austrian justice system received the EU's 2009 E-Government Award – from among 259 entries from 31 countries and 12 finalists – in the category “Government Supporting the Single Market” for the IT solution “European Dunning Procedure” developed jointly by Austria and Germany. It was based on an Austrian solution that had already been in use for some time in Austria.

Development and operation of the Austrian justice system's IT solutions are done in cooperation with the Federal Ministry of Finance, the Federal Computing Centre and external partners. The IT section of the Federal Ministry of Finance furnishes application leaders and organisers, and forms so-called applications teams together with the Federal Computing Centre, and it supports the Federal Ministry of Justice as a client in budget planning and IT controlling work. The Federal Computing Centre supplies IT services for development, operations and

advisory services. External partners round out the spectrum of required skills and resources.

These IT solutions (applications) of the justice system have developed in part independently of one another and at different times, and are based on different technologies.

In order to ensure optimum deployment of IT resources in a foresighted fashion, the Austrian justice system has, for several years now, been pursuing the following initiatives together with its partners:

- Adapting the organisational structures within the Federal Ministry of Justice and in the Federal Computing Centre to improve the overall approach towards all of the IT solutions, and to place the focus more precisely on the justice system's needs.
- At the end of 2005, three IT architects were commissioned with supporting the responsible persons in developing and implementing an **Enterprise Architecture for the justice system**. Modified control processes ensure realisation thereof.
- Multiple usage of services, products, assets, data, and abilities of employees is systematically promoted.
- Developmental processes, methods and tools are standardised.
- A service-oriented solution architecture (SOA) is being introduced. By the end of 2009, approx. 20 re-usable services and products were developed, with an average re-utilisation rate per application of 2.77. The maximum re-utilisation rate in a single application at the end of 2009 was 10 services and products.

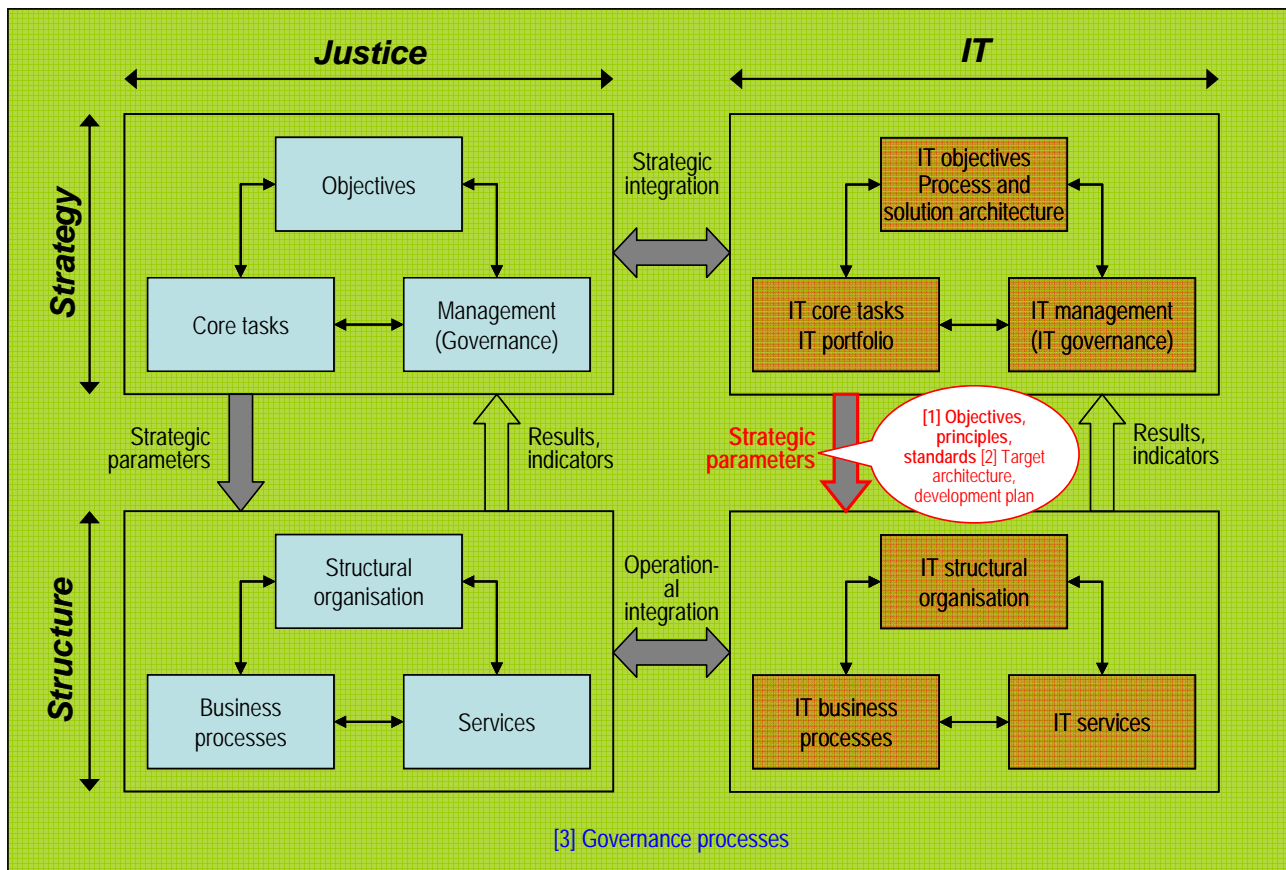
1.4.2 The significance of the IT strategy within the justice system

This document is intended to serve as a guideline to everyone who is involved in developing IT solutions for the Austrian justice system.

We regard 'IT strategy' as the sum of the strategic parameters given to us for developing justice system IT solutions. Those parameters apply both to those who are involved in making investment decisions for justice system IT and to those who are employed within the justice system's IT structure, including the IT partners at the Federal Ministry of Finance and the Federal Computing Centre, and external providers.

The IT strategy of the Austrian justice system rests on the basic intent to align the development of IT solutions for the Austrian justice system even more effectively with the portfolio targets, to create a unitary technology platform and to increase productivity in developing IT solutions by adopting a holistic approach and by reusing components.

The graph below, which is based on the strategy alignment model of Venkatraman, Henderson und Oldach (1993), shows the overall relationship between the justice system and IT at the strategic and operational levels. Theory and practice have shown that where businesses (the justice system) and IT, strategies and structures are in alignment, optimal use can be made of IT investment.



The present document contains the first part of the defined parameters for the IT strategy of the Austrian justice system. It summarises the applicable **objectives** and **standards** relevant to existing IT solutions for the justice system and for IT solutions that are yet to be created, and it establishes **principles** governing decision-making on further developing and operating these solutions (see [1] in figure).

This strategy document also serves as an important basis for elaborating the target architecture and development plan for the justice system's future application environment. These constitute the second part of the strategic parameters (see [2] in figure). The **target architecture** establishes guidelines for future developments, e.g. characteristics of programme functions in terms of so-called "services". The **development plan** is the rough draft for future development and innovation of IT solutions for the justice system.

Governance processes are business processes that ensure alignment of the strategic and structural components and of the strategic and operational integration of justice system and IT components (see [3] in figure).

Target architecture, development plan and governance processes – which together make up the second part of the parameters of the justice system IT strategy – are published separately.

1.4.3 Structure of this document

1. The first section [Document information] contains, after formal details on the document itself, a summary of introductory information.
2. The second section [Goals and environment] describes the goals of the justice system and the goals of legal informatics within the justice system.
3. The third section [Principles] prescribes the rules describing how legal informatics within the justice system is supposed to achieve its goals.
4. The fourth section [IT standards] describes the binding IT standards of the justice system.
5. The Annex contains the Federal Government's E-Government Vision 2020, international recommendations, and quantitative details on legal informatics within the justice system and a list of major justice system applications.

1.4.4 Drafting and updating

The first version of this document was prepared in 2006 in the context of the JUS-IT project. After small amendments in 2007, this document was again revised at the end of 2009 and updated. The basic structure of the document has been retained.

This document is the result of the process “Updates to IT strategy”. This process is described in the document *Governance processes for the enterprise architecture of the Austrian justice system*.

2 Goals and environment

The IT strategy of the Austrian justice system is primarily based on department-specific goals and the goals of legal informatics, but also takes account of general requirements such as the federal government's e-government strategy and international recommendations, which are summarised in the Annex.

2.1 The goals and responsibilities of the Austrian justice system¹

The primary areas of responsibility of the Austrian justice system are to provide a system of courts to deal with civil matters, non-contentious matters, commercial matters, employment and social law matters and in criminal matters, and to provide a prison system and a system of probation administration – including related legislative work.

It is the responsibility of the courts, the state prosecutors, the prisons and the probation officers and of the Federal Ministry of Justice to perform these duties in the spirit of the objectives defined by the European Convention on Human Rights and in accordance with the Austrian legal system.

Judges, state prosecutors, court registrars, civil servants, staff of the executive branch, contract workers, social workers, physicians, teachers and a whole host of other professional groups who work within the Austrian justice system have the central goal of ensuring legal certainty and satisfaction with the justice system. They must do so by performing this challenging catalogue of obligations in a manner which is legally compliant, objective, reliable, fair and rapid, in order to preserve and to increase confidence in the justice system.

In this context, the primary objectives are as follows:

- A fair and safe society
- Legal protection by an independent judiciary
- The justice system as a large service enterprise

Confidence in the justice system's ability to function fully is an indispensable footing for ensuring that Europe remains a zone of freedom, security and law.

¹ Source: www.bmj.gv.at/justiz

2.2 The goals of the Justice Ministry in detail

2.2.1 A fair and secure society

1. Legal relations are clear
2. Individuals enjoy legal protection and protection of fundamental rights
3. Extrajudicial resolution of disputes is promoted
4. Crime is prevented wherever possible prospectively
5. Crime is effectively combated in collaboration with other authorities
6. Perpetrators being sentenced to prison are detained in a safe place and should be re-integrated into society through care and therapy
7. There are fair basic rules for an efficient economy
8. Legislation is of good quality and is comprehensible
9. Laws are drafted in an open and democratic fashion
10. Legal norms are clear and comprehensible in terms of their wording
11. Legislation reacts to new developments and challenges

2.2.2 Legal protection by independent judiciary

1. The basic conditions are ensured so that appropriate rulings can be made in legal disputes
2. Proceedings are carried out quickly and impartially – everyone is equal in the eyes of the law
3. Court costs are reasonable – if someone is unable to afford to enforce his claims in court, he may receive legal aid
4. The legal relations of companies are recorded in the Commercial Register, and the legal status of properties are recorded in the Land Register, and thus accessible to all

2.2.3 The justice system is a large service enterprise

1. The courts are modern and have appropriate equipment
2. Performance of justice services is done at the level of the individual citizen
3. The staff of the justice system is selected carefully and receives the best training and continuing education

2.3 Goals of legal informatics within the justice system

This section summarises the objectives of legal informatics within the justice system and the results of IT deployment, both in terms of aspirations and in terms of what has already been achieved.

The goals are ordered by priority. Priority 1 is the highest level of priority.

2.3.1 Priority 1

2.3.1.1 Modern service for the justice system, citizens and the economy

Its intended utility goes beyond a business-driven approach to the judiciary, and includes the social consequences, as well.

- Easier access to law and greater legal certainty for citizens and business
- Improvement of market opportunities for Austrian economy
- Simplification of the work of justice system staff, who then have more time for core duties

2.3.1.2 Acceleration and simplification

Automated procedures instead of manual file administration accelerate and simplify disposition of cases, permit them to be resolved rapidly and IT applications provide staff with optimum support. In addition to the business aspects for the justice system, shorter length of legal proceedings means, inter alia, a greater degree of legal certainty as well as an acceleration of payment flows and reduction of financial losses/defaults. Disputes can be decided at an earlier point in time.

2.3.1.3 Using IT as a driver of modernisation within the justice system

IT solutions can simplify, improve and accelerate business processes (work sequences) in the courts, the state prosecutors' offices and the prison system. These objectives require changes to be made both in terms of work processes and in terms of IT solutions.

2.3.1.4 Specific IT solutions for all user groups

The IT solutions used within the justice system meet the specific needs of the individual user groups (judges, public prosecutors, court registrars, court staff, public prosecutors' offices and prisons) whilst still preserving uniformity of the overall IT scheme (target architecture and synergies).

2.3.1.5 Achievement of savings

In today's environment, the main argument for developing and operating IT solutions is to achieve cost savings and greater cost-effectiveness. In this way, the justice system makes its contribution towards a balanced budget.

2.3.1.6 Provision of management information

An organisation's ability to perform optimally will also depend on the availability of meaningful performance data. These will form the basis e.g. for documenting the processes of judicature, management decisions on controlling the organisation of the justice system, supporting the legislative branch, monitoring the length of proceedings, monitoring prison capacity and implementing prison system planning, optimising staff deployment and documenting overtime, controlling, etc.

2.3.1.7 Cost-benefit calculation

It goes without saying that all project proposals and IT deployment as a whole employ a business-based approach.

2.3.1.8 Automation of large-scale procedures wherever possible

The more frequently procedures are performed, the greater the potential for savings by automating them. For this reason, procedures entailing a high degree of multiplication (so-called “large-scale procedures”) are automated wherever possible.

2.3.2 Priority 2

2.3.2.1 Generating reasonable income in exchange for the services rendered – lower costs for the general public

The receipts for services by the justice system are used to cover the costs of providing those services. The justice system is 68% self-financing. In 2010, there were budgeted expenditures of €1,167 million, with €796 million in receipts. The IT budget is set at €35 million. Legal informatics help to keep the costs of the justice system to the general public as low as possible. See comments in section 2.3.1.5.

2.3.2.2 Modern technology IT workstations for staff

The staff of the justice system have the same modern working tools available to them as do employees in the private sector of the economy.

2.3.2.3 Access to applications irrespective of location

Access to the applications is intended to be possible irrespective of where one’s office is located, i.e., all of the applications must be serviceable at all workstations in the justice system, provided that the user has the necessary authorisations. This goal extends to e.g., mobile bailiffs, improved flexibility of secretarial deployment, cross-office and disposition of cases and achieving workload balance.

2.3.2.4 Functionally modern IT solutions within the justice system

The IT solutions of the justice system are functionally the most modern available, i.e. at all times they reflect the applicable legal norms.

2.3.2.5 High availability of business-critical applications

Business-critical IT solutions are defined as such, and are developed to respond to the special requirements of the justice system. Within the defined core periods, they are operated as highly available and highly performing IT-systems.

2.3.2.6 Image of the justice system

The justice system is presented both externally and internally as an organisation that works effectively, that is open to new challenges, including to participation in competitions, national and international events and projects, PR work, the web presence of the judiciary as well as constant provision of information to staff via the intranet.

2.3.2.7 Successful methods for developing and operating IT solutions

In order to ensure the greatest possible efficiencies of legal informatics, modern models and methods of software engineering and work organisation (e.g. project

and portfolio management, agile software development, resource planning, support structures) are used for developing and operating the IT solutions.

2.3.2.8 Security of IT solutions

The goal of IT security is to ensure availability of IT solutions (including the data), to assure the authenticity, integrity and confidentiality of the data and to prevent use of or damage to the IT solutions by unauthorised persons.

IT security is intended to cover all of the facilities (both systems and individuals) which are at risk and which require protection. These include inter alia buildings, hardware and software, networks, communications systems, operating instructions and other software solution documentation, the users of the IT systems and support facilities such as the helpdesk.

IT security is premised on organisational and technical measures to reduce the potential for risk to the IT solutions and the users of those systems. Protective measures include elaborating security designs for developing and operating the IT solutions and implementing the security standards set forth within those designs, such as the use of access authorities. The IT security measures put in place are intended for example to detect and prevent unauthorised access to systems, applications and data (e.g. through the use of firewalls) and to detect and eliminate security-critical software and configuration errors.

The IT security officer provides information on and coordinates the IT security measures taken and assists in preparing security-relevant management decisions.

The IT security measures taken are also subject to economic considerations. The scope of the security measures taken is premised on risk assessments.

2.3.3 Priority 3

2.3.3.1 Risk control in handling transactions using current technology

Deployment of new technologies, for example mobile telephony, adapted to the needs of proceedings, not innovation at any price. Risk control, “leading edge” as opposed to “bleeding edge”.

2.3.3.2 Long-term goal of recording all case data electronically

This development is intended to lead to the electronic file, taking account of cost-effectiveness. Rapid processes, which are low in paper, are the goal. Multiple recording of data is to be avoided. Re-recording of data is rarely economical.

2.3.3.3 Improvement of quality

There should be an improvement in the quality of justice system processes. The goals are easier access to information and avoidance of errors. Where necessary, it should be possible to furnish complete information. Methods of quality assurance and quality management are required to be used.

2.3.3.4 Avoidance of data loss thanks to IT processing

Increased security by avoiding data loss is a welcome side-effect of the technology used.

2.3.3.5 Reducing the burden on staff in performing routine tasks

Staff may be deployed for more intellectually challenging tasks, which leads to their perception of their jobs as meaningful.

2.3.3.6 IT is not supposed to replace court and agency decisions, but rather support them in an optimal way

IT remains within its domain, and avoids research projects with questionable utility. Decision-making competence remains with the judges and judicial officers.

2.3.3.7 Last resort – back to manual procedures

For reasons of costs, and applying the “Pareto” rule, IT is intended to support standard cases and not extraordinary cases. The user should have the option of handling cases on an individual basis, as well (file kept manually, i.e. not using comprehensive IT support).

The “last resort” back to manual procedures should always be possible as a backup solution.

2.3.3.8 International and national compatibility

Conformity with recommendations of the Council of Europe, the eGovernment and eEurope conferences of ministers of the EU as well as the “Digital Austria” national platform.

The fact that the Austrian justice system received the eEurope Good Practice Awards in 2001 and 2005 and the E-Government Award of the European Union in 2009 confirms the high degree to which objectives have been achieved.

2.3.3.9 International replication of Austrian justice system IT solutions

This goal should be achieved i.e. through information exchange, advice and transfer of know-how, support of sales partner IBM and reception of foreign delegations.

2.3.3.10 Holistic approach for defining goals and planning solutions

It is only a holistic approach that allows commonalities and thus synergy potentials to be identified. Common challenges should be resolved in common. Phased plans permit step-by-step realisation of even large projects. Even small steps can have big repercussions. “Broad vision, little steps“.

3 Principles

This section describes the manner in which legal informatics within the justice system is intended to achieve its goals. These principles also determine where and how the justice system deploys its resources and budgeted funds for legal informatics. The purpose of the principles is to create a referential system through which substantive, and IT-related decisions may be justified.

The principles of IT strategy are each assigned a sequential number and name beginning with SP, which stands for “strategic principle”.

3.1 SP-1 Priority of these principles

These principles of legal informatics apply to all sections of the justice system (always including the application teams and development partners).

Reasoning: Only where all of the sections of the justice system follow these principles will legal informatics be able to offer information and support in consistent, quantifiable quality to decision-makers. In the absence of this principle, individual actions, as well as discrepancies, would undermine legal informatics.

Interim goals and effects:

- All legal informatics initiatives must first be reviewed for conformity with these principles.

3.2 SP-2 Maximum utility for the entire justice system

Decisions in the realm of the legal informatics are taken in order to optimise the overall utility for the justice system.

Reasoning: Decisions taken from a global justice system perspective will have greater and more sustained value than decisions taken from the vantage point of a single section of the justice system. Maximum utility in the sense of “return on investment” demands that legal informatics decisions must be taken in accordance with the goals and priorities of the entire justice system.

Interim goals and effects:

- In order to optimise the overall utility for the justice system (i.e. for the courts, the offices of state prosecutors, the prisons and the Federal Ministry of Justice), planning and control of IT solutions and of the IT infrastructure are undertaken in one section and two departments, who act in line with each other.
- Coordination of IT solutions and infrastructure is undertaken centrally and is independent from the body responsible for the content of the IT solution.

- In order to optimise the overall utility for the justice system, planning and control of new initiatives have to be determined by legal informatics. Technology alone will not be capable of bringing about this change.
- Several sections will have to abandon their own preferences in favour of a standardised solution to increase utility or reduce costs (= overall advantage for the justice system).
- Priorities for developing solutions have to be set for the entire justice system.
- Business processes and the elements thereof, services and products must be used jointly across and beyond organisational boundaries.
- Legal informatics projects must be carried out in conformity with the goals of the justice system on the basis of the procedure and product portfolios. The sections should pursue legal informatics initiatives that accord with the goals of the justice system, IT strategy, “to-be” architecture and the priorities of the overall justice system. Where necessary, appropriate changes should be made to plans.
- In exactly the same way, priorities should be adapted, where necessary. Decisions on this question are taken in the justice system coordination department, decisions in the realm of IT with implications for the budget are taken in the synergy steering group, and in the steering committees for applications.
- The responsible individuals for the individual sections must review the level to which targets have been met on a periodic basis, using common indicators which are yet to be elaborated. Depending on the result of that review, controlling measures are then initiated, e.g. adaptations to strategy, improved definition of goals, rewards.

3.3 SP-3 Legal informatics is important to everyone

All of the sections of the justice system and the development partners (Federal Ministry of Finance, Federal Computer Centre and partners) take part in decision-making on legal informatics issues.

Reasoning: The sections of the justice system are represented by individuals involved or by clients. These are, inter alia, the judges, state prosecutors, judicial officers, court staff and state prosecutor’s office staff members, as well as staff of the penal facilities, specialist sections and justice system partners, particularly lawyers and notaries. The substantive requirements of these sections are addressed in the form of legal informatics solutions. In order to ensure that legal informatics covers substantive needs, all of the parties involved in all aspects of the IT environment have to be consulted.

Interim goals and effects:

- The “owners” of the procedures (these are the individuals who are responsible for managing workflows and processes) and the process experts from the justice system specialist sections, the divisions of the justice system vested with IT portfolios and the specialist IT staff responsible for development and operation of the solutions (Federal Ministry of Finance, Federal Computing Centre and partners) must define legal informatics requirements as a common team.
- Provision of appropriate resources by the parties involved or the clients for legal informatics work is necessary.

3.4 SP-4 Common solutions

Development of common solutions for the entire justice system is preferred to developing comparable and similar solutions for subsections of the justice system.

Reasoning: Functionalities that are duplicated are expensive to develop and operate and promote the creation of inconsistent data.

Interim goals and consequences:

- It is no longer permissible for IT application teams of the justice system to develop IT components especially for their own use, if there are comparable or similar requirements in other sections.
- In addition to informal communication between the architects and the applications teams of the justice system regarding requirements and product design, process reviews, requirements reviews and design reviews are undertaken by the applications teams.
- Common developments are undertaken in the form of synergy projects.
- Information and data that are gathered and made available using legal informatics' IT solutions will in future be much more standardised. The reason for this is that specific components for areas of the justice system are intended to be replaced in stages by components capable of deployment throughout the justice system. The impetus and the development continue to come from the Federal Ministry of Justice from an applications team, but in future solutions will be implemented throughout the entire justice system wherever possible.
- The justice system will exploit synergies with IT solutions of other departments to the greatest possible extent.

3.5 SP-5 Change-friendly processes and IT solutions

Processes and IT solutions of the justice system itself, as well as processes and methods to develop these solutions, should be designed such that changes or updates can be simply and cost-effectively implemented. In the interests of sustained utility, this includes effectively observing the constitutional principles of cost-effectiveness, appropriateness and economy over the entire life-cycle of an application.

Reasoning: Legal informatics must react in a reasonable way to legal and other external changes. Limited resources and time pressure may not constitute an insurmountable obstacle to doing so.

Interim goals and effects:

- The objective is to implement a service-oriented architecture (SOA).
- New IT solutions should be brought forth using smaller components that can be independently developed and are easier to maintain.
- Existing IT solutions should be broken down into components such that their scalability, interoperability, multi-use and serviceability are promoted in the long-term.
- Components in common use should be developed as shared services from the outset.
- In the case of infrastructural decisions, preference should be given to those variants that are better suited to components technology and shared services.
- Preference should be given to deploying solution components that support auto configuration, auto-cure and auto-administration (autonomic computing).

- Business processes and activities are analysed and modelled. IT support of activities is depicted in the form of “use cases” and “user stories”.
- Variable and needs-driven use and charging for IT services are to be given priority, with the goal of reducing costs (on-demand computing).
- When developing new IT solutions, their long-term sustained utility should be given consideration.
- Agile development is the preferred method of software development.

3.6 SP-6 Enterprise Architecture of the justice system

Planning and decision-making in legal informatics, as well as development of IT solutions, are oriented to the enterprise architecture of the justice system, consisting of process architecture, solution architecture and governance processes. The enterprise architecture of the justice system is service-oriented (SOA).

Reasoning: Only through approaching and dealing with these tasks in a structured fashion that encompasses aspects of the factual situation, technology and management, can one be sure to develop and operate IT solutions in a manner that is goal-oriented, holistic, optimised and economical.

Interim goals and effects:

- The IT architects of the justice system (process and solution architects) work in collaboration with the people affected (e.g. clients, owners of procedures, procedural experts, organisers, product managers, product architects, developers) on specifications for the enterprise architecture relevant to legal informatics.
- Basic elements of this are the definition and creation of replicable business and technical services.
- Based on the IT strategy of the justice system, a TO-BE architecture – for processes and solutions – should be defined. Where new developments or enhancements deviate from the TO-BE architecture, then a justification for this must be given.
- Development of services and products is based on an analysis of the business processes.
- The defined governance processes are binding ones and they assist with the practical implementation of the principles described here.

3.7 SP-7 Constant renewal

Affected parties, clients and development partners of legal informatics undertake continuous reviews to see whether increases utility for the justice system may be achievable by means of potential innovations (both technological and substantive), and make proposals accordingly.

Reasoning: The utilisation of new technologies is a fundamental task for legal informatics. The combination of process optimisation and new technological possibilities has always been the engine driving increases in productivity and quality within the justice system.

Interim goals and effects:

- All parties affected must stay (in terms of technology and substance) abreast of the current state of developments.

- Potential innovations should be documented, systematically evaluated and communicated to others.
- Coordination of constant renewal is the job of the justice system architects.

3.8 SP-8 Legal conformity

All of the processes of legal informatics and the IT solutions produced must comply with law in force and other applicable norms and standards.

The deployment of IT within the justice system is based in large part on the following statutory provisions:

- Organisation of Courts Act [Gerichtsorganisationsgesetz (GOG)] §§ 80 to 85 and §§ 89a to 89k
- State Prosecutors Act [Staatsanwaltschaftsgesetz (StAG)] §§ 34a and 34b
- Code of Criminal Procedure [Strafprozessordnung (StPO)] §§ 74 ff. as amended by the Criminal Procedure Reform Act [Strafprozessreformgesetz 2005]
- Penal System Act [Strafvollzugsgesetz (StVG)] §§ 15a, 15b and 15c
- Support Advance Act [Unterhaltsvorschussgesetz (UVG)]
- Data Protection Act [Datenschutzgesetz (DSG)]
- Judiciary Act [Richterdienstgesetz (RDG)]
- Civil Service Act 1979 [Beamten-Dienstrechtsgesetz 1979 (BDG)]
- Contract Staff Act 1948 [Vertragsbedienstetengesetz 1948 (VBG)]
- Service Procedures Act 1984 [Dienstrechtsverfahrensgesetz 1984 (DVG)]

The use of justice system applications is clearly prescribed for staff members in the VJ-Online Handbook (§ 80 (3) Organisation of Courts Act. The term “VJ-Online Handbook” in § 80 (3) of the Organisation of Courts Act should be understood in the broadest sense to encompass all of the IT solutions within the justice system.

Reasoning: It is a matter-of-course principle of the justice system that all of the laws in force and other applicable standards must be observed. This does not exclude the possibility of striving to improve justice system procedures that could lead to changes in legislation or regulations.

Interim goals and effects:

- Areas of justice system and legal informatics have to observe laws in force and other applicable norms and regulations.
- There has to be awareness of what the relevant laws and regulations are. Staff must accordingly be familiar with the contents of laws and regulations within their personal field of duties.
- Changes to laws or regulations may lead to changes in the workflow of the justice system or of IT solutions. In addition, improvements to justice system procedures may also necessitate changes of laws or regulations.

3.9 SP-9 Autonomous justice system IT

The justice IT system constitutes an integral component of the justice system and thus falls fully within the jurisdiction of the Ministry of Justice.

Reasoning: The justice system constitutes the third pillar of the rule of law, next to the legislative and the administrative branches. The Federal Constitution Act [*Bundes-Verfassungsgesetz*] (Art. 94 B-VG) provides that the justice system is separate at all levels from the administrative bodies of government. Judges, court registrars and state prosecutors are set up as jurisprudential bodies (B-VG Art. 87, 87a, 90a). Judicial independence is rooted in the Austrian constitution (B-VG Art. 87). IT-supported judicial procedures and judicial data processed through the use of IT link the justice system and the justice IT system into a single unit. It is only consistent that the rules applicable to the justice system apply equally to its IT system.

Interim goals and effects:

- The justice IT system consists of its infrastructure and the entirety of the IT solutions. The operation and further development of justice IT are planned and managed in a uniform way.
- Where operation and development of justice IT are outsourced to a service provider, institutional control by the Ministry of Justice over that service provider must be assured.
- Justice-sensitive areas (e.g. electronic file management, investigations of state prosecutors) and typical executive services (e.g. commercial register, land registry) must be defined and separated from one another.
- Cross-ministry IT standards and solutions must be tested by legal informatics for their suitability for use in the justice system before they are deployed.

4 IT standards of the justice system

This section summarises and briefly describes the standards that are binding for the justice system.

A standard is a standardised, generally recognised and generally observed manner of making or performing something, which has established itself as a preference to other manners of making or doing things ².

The use of standards promotes re-usability of IT components, data and skills and helps to avoid costs which arise due to lack of standardisation. Standardised interfaces facilitate the ability to combine system components and the development of complex and linked systems. Open standards ensure that justice system IT is independent of particular manufacturers. The observance of standards also ensures minimum quality standards within the relevant parts of IT solutions.

Industry standards are technical standards that have become de-facto standards through successful deployment in practice (often over the course of many years), rather than through formal standardisation processes. Often, such standards arise as a result of technological arrangements between a number of companies and are only elevated to the level of official standards years later by (inter)national committees. Examples of very successful industry standards are XML, J2EE, the OpenDocument Format and ethernet specifications.

Austrian e-government Standards are set in the context of the Federal Government's ICT strategy on the basis of national and international standards for the realm of e-government, in order to support harmonisation of IT applications. Examples of Austrian e-government Standards are the modules for online applications (MOA) and the portal interconnection protocol (PVP).

Open standards are standards that arise when the description of a protocol, a data format or an interface is accessible without limitation. They are issued by standardisation committees and updated by them. Examples of open standards are the TCP/IP protocol, HTTP, and the HTML format.

In developing IT solutions for the justice system, open standards should be used primarily.

The following standards are components of the *Target Architecture of the justice system*.

² Source: Wikipedia

4.1 The programming language Java

The programming language JAVA has been subject to continuous and broad-based development since 1996, the year in which it was first used within the justice system. The fact that a large group of software manufacturers support Java means that it is very likely that this development will continue. In addition, the implementation of the programming language Java as an open-source project is being promoted by several companies, which speaks well for the longer-term availability of the platform. Java can be deployed on all of the relevant platforms of the justice system. For these reasons, Java is the preferred programming language for justice system applications.

4.2 The Java-2-Enterprise environment (J2EE)

J2EE (Java 2 Enterprise Edition) is an environment for enterprise applications that runs on all of the relevant platforms of the justice system. Just as the programming language Java, it enjoys support from almost all of the big software manufacturers. The programmes that are written for this environment will, in all likelihood, remain serviceable for the longer term. For this reason, J2EE is the preferred development environment for justice system applications.

4.3 The portal interconnection of the Austrian public authorities

The portal interconnection of the public authorities facilitates standardised access to applications of other public organisations. Access of other organisations to the applications of justice system is also being standardised. Many public organisations, and the ICT Board of the Federal Government, support the agreements and technical protocols of the portal interconnection. In order to exploit these potentials for synergies, the justice system will deploy the portal interconnection and the associated agreements and technical protocols on a preferred basis, in order to facilitate mutual use of applications by the justice system and other public organisations.

4.4 The modelling language UML

UML (Unified Modelling Language) is characterised by a high level of market penetration. Pursuant to a poll of the Institute for Enterprise Architecture Developments (IFEAD), *Trends in Enterprise Architecture 2005, Edition 1.0, 2005*, <http://enterprise-architecture.info>, UML is the most popular modelling language in enterprise architectures. UML is supported to a large degree by modelling tools. The standards XMI (XML Metadata Interchange) raises the expectation that various tools will be able to exchange UML data easily in future. For these reasons, UML is the preferred modelling language for software and business processes of the justice system.

4.5 Structured mark-up of information with XML

eXtensible Markup Language (XML) is a common, standardised mark-up language for structured description of information in documents.

The use of a justice system-wide message scheme based on XML technology and which is as standardised as possible (taking international and national standards into account) is intended to facilitate and promote the expansion of electronic data

exchange both for external submissions and dispositions as well as with respect to intra-IT-applications of the justice system.

4.6 Open Document Format (ODF)

OASIS Open Document Format for Office Applications (abbreviated: OpenDocument, ODF) refers to open exchange formats for office programme data for which OASIS has issued specifications and which has now been published as international norm ISO/IEC 26300.

An OpenDocument file is either an individual XML-file or a collection of various XML-files and other objects (e.g. embedded images) that are bundled into a compressed file (e.g. ZIP). By means of XML format, users can make changes to a document using even a simple text editor.

4.7 OpenOffice for word processing

The standard word processing programme used by the justice system is OpenOffice Writer from the office suite of the same name, OpenOffice.org. OpenOffice.org is a free office package consisting of a combination of various programmes for word processing, table calculation and presentation. OpenOffice also includes a database programme and a formula editor.

4.8 Portable Document Format (PDF/A)

ISO 19005-1 defines “a data format based on PDF, known as PDF/A, which provides a mechanism for displaying electronic documents in a way that the visual image is preserved over time independent of the tools and systems used to create, store and reproduce it.”

A key factor in respect of the reproducibility of PDF/A documents is that all of the necessary information is contained within the document itself. This includes visible content such as texts, vector graphics, half-tone images, fonts, coloured areas and much more. A PDF/A document may not, by contrast, refer directly or indirectly to external sources. Examples of this are links to images which are stored elsewhere or fonts which are not embedded within the PDF/A document itself.

The decision to prescribe PDF/A was made with the goal of securely storing entire files in a manner which was not only not subject to time limitations, but which enabled them to be accessible even after decades without any great technical expense or effort.

For example, the PDF/A format is used for document exchange in the context of the electronic legal filing process [Elektronischer Rechtsverkehr (ERV)], for printing and for archiving.

4.9 Consideration of Open-Source solutions

When selecting components of solutions, open source solutions should be considered by comparison with commercial software solutions.

There is a whole host of advantages which offset the disadvantages of open source solutions such as functional obsolescence (no guaranteed further development by

a manufacturer), the need to perform one's own maintenance and – experience has shown – less concern for reverse compatibility in the case of further developments. The advantages are: usually lower procurement costs, lower dependence on manufacturer's strategies, better adaptability and modifiability and less dependence on maintenance and updates by the manufacturer.

Licence models of open source solutions should be precisely scrutinised as well, because they may entail far-reaching consequences.

The decision between commercial software solutions and open source solutions should be made in the individual concrete case after undertaking a holistic review, taking account of economic aspects.

5 Annex

5.1 E-Government in Austria

The “platform digital Austria” or **Plattform Digitales:Österreich** (PDÖ) is the coordination and strategy committee of the federal government for E-Government in Austria. Publications are available on the internet at www.digitales.oesterreich.gv.at. The Federal Ministry of Justice is involved on the federal government’s eGovernment initiatives.

5.1.1 E-Government Visions 2020

E-Government is a synonym for a modern and innovative state in which communications are simpler, better and quicker. E-Government includes the entirety of all of the electronic services of state administration for the citizens of the country and facilitates their access to and their contact with public authorities.

Simple, efficient and better contacts with public administration

- One-stop principle
- No-stop (proactive approach of public administration, including as between administrative authorities)
- Virtual procedural advisor, including situation-specific forms for specific needs and back-office links/integration
- Optimal back-office procedures in public administration
 - The prerequisites are register access (technology and costs), interfaces and electronic identification
 - Optimising the register environment and filling gaps – standard procedures can be run via registers (quality and harmonisation of registers)
- Use of data already available from public authorities (avoiding the need for annexes and evidentiary documentation)
- Optimising communications with business, e.g. proactively promoting eProcurement
- Electronic document delivery that is uniform and widely used

Uniform user interface for applications

Secured electronic identity for all individuals and business entities

Convergence of E-Government / E-Health / E-Justice / E-Commerce / E-Learning / E-Environment / EU and international developments

ONE IT solution for ONE task

Creating transparency and improving confidence (active data protection)

- Accessing one’s own cases and data (registers)
- Confidence and security in and of the services provided (not involving classic computer centre security questions)

- Simplifying and facilitating access to information

Diversity in E-Government (Variety of users)

- Free access for all – Elimination of barriers to access [focus: accessibility]
- Gender-equality in E-Government
- Facilitating multilingual access
- Lack of barriers
- Mobility and other access channels (mobile devices, digital TV and the like)

Participation and interactive information systems

- Providing selected public raw data [focus: content]
- Mashups with private services (maps, route planners, forums and the like)
- Observation and targeted use of innovative developments for public administration

5.2 International Recommendations

“The following declaration describes the modern practice of E-Government and serves as a valuable challenge and guideline for Austrian legal informatics.

5.2.1 Ministerial Declaration on eGovernment – Malmö, November 2009

Our Shared Objectives by 2015: Citizens and businesses are empowered by eGovernment services designed around users needs and developed in collaboration with third parties, as well as by increased access to public information, strengthened transparency and effective means for involvement of stakeholders in the policy process

Our public administrations should therefore:

9. Improve eGovernment services to cater for the different needs of users and deliver them in the most effective way. We will develop user-centric services that provide flexible and personalised ways of interacting with public administrations. We will develop multi-channel strategies in order to deliver eGovernment services in the most effective way. We will develop inclusive services that will help to bring down barriers experienced by digitally or socially excluded groups. Efficient eGovernment services built around the needs of users will increase trust in government and contribute to higher user satisfaction whilst achieving efficiency gains.

10. Invite third parties to collaborate on the development of eGovernment services. We will actively seek collaboration with third parties, for example businesses, civil society or individual citizens, in order to develop user-driven eGovernment services. Collaboration with third parties will stimulate the creation of innovative, flexible and personalised services, increase the overall effectiveness of services and maximise public value.

11. Increase availability of public sector information for reuse. We will increase availability of public sector information for reuse, in accordance with the spirit of and the conditions established by Public Sector Information Directive 2003/98/EC. We will encourage the reuse of public data by third parties to develop enriched services that maximise the value for the public. New demand-led information products and services enabled by the reuse of public sector information will support the transition of Europe to a knowledge-based economy.

12. Strengthen transparency of administrative processes. We will explore how we can make our administrative processes more transparent. Transparency promotes accountability and trust in government.

13. Involve stakeholders in public policy processes. We will actively develop and promote effective, useful and better ways for businesses and citizens to participate in the policy processes. Increased public engagement through more effective methods at all levels enhances government’s efficiency and effectiveness and improves the quality of its decisions and services.

Mobility in the Single Market is reinforced by seamless eGovernment services for the setting up and running of a business and for studying, working, residing and retiring anywhere in the European Union

Our public administrations should therefore:

14. Create a noticeable and positive change in the ease with which a business can be set up and run in the Single Market. We will enable and support the creation of seamless cross-border eGovernment services focusing our efforts on how businesses can be set up and provide and procure services and goods. To achieve this we will increase the trustworthiness, security and interoperability of eGovernment services and systems in the Single Market in order to enable and support the creation of seamless cross-border services. A well-functioning Single Market is a prerequisite for increased competitiveness of the EU.

15. Create a noticeable and positive change in the ease with which citizens can study, work, reside and retire in any Member State. We will enable and support the creation of seamless cross-border eGovernment services by focusing our efforts on these life-stages. Providing cross-border eGovernment services and enabling efficient electronic cooperation between Member States should make mobility for citizens easier and less costly.

16. Develop cross-border eGovernment services that are based on real social and economic needs. We will initiate joint projects of cross-border eGovernment services based on specific needs. Sectoral projects would benefit from synergies with other sectors and the reuse of existing infrastructures rather than developing specific sectoral-based solutions.

Efficiency and effectiveness is enabled by a constant effort to use eGovernment to reduce the administrative burden, improve organisational processes and promote a sustainable low-carbon economy

Our public administrations should therefore:

17. Reduce the administrative burden for citizens and businesses. We will use eGovernment to reduce administrative burdens, partly by redesigning administrative processes in order to make them more efficient. We will exchange experience and jointly investigate how public administrations can reduce the frequency with which citizens and businesses have to resubmit information to appropriate authorities. We will emphasise respect for privacy and data protection with regard to the use of personal data since it is crucial for enhancing confidence and trust. Trust and security are integral for take-up of services by citizens and businesses when creating services that rely on the electronic exchange of information.

18. Consider how organisational processes could be improved. We will analyse on a routine basis how organisational processes can be developed when we apply information and communication technologies in order to increase efficiency and effectiveness. We will foster innovation and relevant skills of our civil servants in order to increase the capabilities of our public administrations. We will also share experience, good practice and research on how this can be achieved. eGovernment is an important enabler for organisational improvements.

19. Reduce their carbon footprint. We will use information and communication technologies to support our efforts in making demonstrable reductions in carbon

emissions and in contributing to wider carbon-reduction targets. We will cooperate to build a common understanding of what our targets and measurements are to lower energy consumption. Information and communication technologies play a leading role in the fight against climate change, contributing to a sustainable low-carbon economy.

The implementation of the policy priorities is made possible by appropriate key enablers and legal and technical preconditions

Our public administrations should therefore:

20. Create appropriate preconditions and key enablers to ensure closer administrative cooperation. We will conduct studies to identify and evaluate legal, organisational, semantic, and technical obstacles that hinder the development of cross-border eGovernment services and consider their solutions. Information exchange and administrative cooperation in the European Union enables our administrations to intelligently connect with each other, businesses, citizens and organisations in order to reach joint objectives and to facilitate the implementation of European legislation.

21. Pay particular attention to the benefits resulting from the use of open specifications in order to deliver services in the most cost-effective manner. We will ensure that open specifications are promoted in our national interoperability frameworks in order to lower barriers to the market. We will work to align our national interoperability frameworks with applicable European frameworks. The Open Source model could be promoted for use in eGovernment projects. It is important to create a level playing field where open competition can take place in order to ensure best value for money.

22. Regard innovation as an integral part of our way of working. We will promote innovation in eGovernment services through research and development, pilot projects and other implementation schemes. We will explore and develop the possibilities offered by new open and flexible service architectures and new computing paradigms. Innovation is a central part of eGovernment and will contribute to the goal of making Europe a leading knowledge-based economy.

5.3 Quantitative depiction of the Austrian justice system

5.3.1 Organisational structure

Organisational unit [number]

Courts and state prosecutors

OGH - Oberster Gerichtshof (Supreme Court of Justice) / GP - Generalprokuratur (General Procurator) [1 each]

OLG - Oberlandesgerichte (Higher Regional Courts of Appeal) / OStA - Oberstaatsanwaltschaften (senior public prosecutors' offices) [4 each]

Courts [20] / StA - Staatsanwaltschaften (public prosecutors' offices) [17]

BG – Bezirksgerichte (district courts) [140]

Penal system

Prisons [28]

5.3.2 Staffing of justice system

NUMBER OF PERSONNEL (Full-time employees) 2009	
Federal Ministry of Justice (Central office):	203,82
A-level civil servants, judges and public prosecutors (including assigned positions)	103,00
Other members of staff (including assigned positions)	100,82
Supreme Court of Justice and Procurator General's office:	113,00
Judges (including judges at records office of Supreme Court of Justice)	66,00
Public prosecutors	14,00
Other staff	33,00
Other courts and public prosecutors:	6.892,07
Judges	1.587,50
Public prosecutors	321,75
Candidate judges	201,00
Court registrars	628,43
Other staff	4.153,39
Prisons and enforcement agency:	3.578,10
Total	10.786,99

Table 1: Staffing of justice system

5.3.3 Work of the courts

CASES IN 2009				
	District Courts	Courts of 1st instance	Higher Regional Courts	Supreme Court of Justice
Civil matters	576.741	95.758		
Non-contentious matters	421.132	18.421		
Commercial Register		263.431		
Judicial execution matters	1.076.946			
Insolvency matters	12.329	14.978		
Appellant remedies in civil matters		24.043	8.861	2.651
Criminal matters	39.220	60.429		
Appellant remedies in criminal matters		3.742	8.231	907
Land Registry matters	697.536			
Judicial Administration matters	167.908	127.759	63.659	6.496
TOTAL	2.991.812	608.561	80.751	10.054

Table 2: Work of the courts

5.3.4 Other key figures on the use of IT in the justice system

Legal informatics has succeeded in continuing to the extent planned with the programme to increase efficiency and the quality of service by the justice system through the use of IT.

In 2003, expenditures of approx. €36.5 million were made, and the benefit gained exceeded the amounts spent by €14 million.

The 2003 IT budget was approx. €36.5 million, which comprised approx. 4% of the justice system's budget. In 2010, € 35 million are available for IT, corresponding now to only approx. 3% of the budget of the justice system.

5.4 Main justice applications

Main justice applications are:

- Automated court procedures
- Electronic legal filing system [Elektronischer Rechtsverkehr (ERV)]
- Land Register
- Commercial register
- List of experts, interpreters, mediators and insolvency administrators
- Edict file (insolvency register, real property auctions, commercial register publications, ...)
- Certifications
- IT in the penal system
- Advances of child support
- Collection department
- Business Intelligence / Justice system statistics
- Electronic documents archive
- Electronic signatures
- Legal information system [Rechtsinformationssystem (RIS)]
- Language recognition in the justice system
- Electronic administration of text processing work
- Justice ministry public website - www.justiz.gv.at
- Justice ministry intranet
- Video conferences
- European Business Register (EBR)
- European Land Information System (EULIS)
- Justice portal (user administration)

Further current information (particularly information on the individual justice IT applications) are contained in the most recent version of the brochure „eJustice Austria – Use of IT in the Austrian Justice System“ (BMJ, BMF, BRZ), latest version: February 2009.