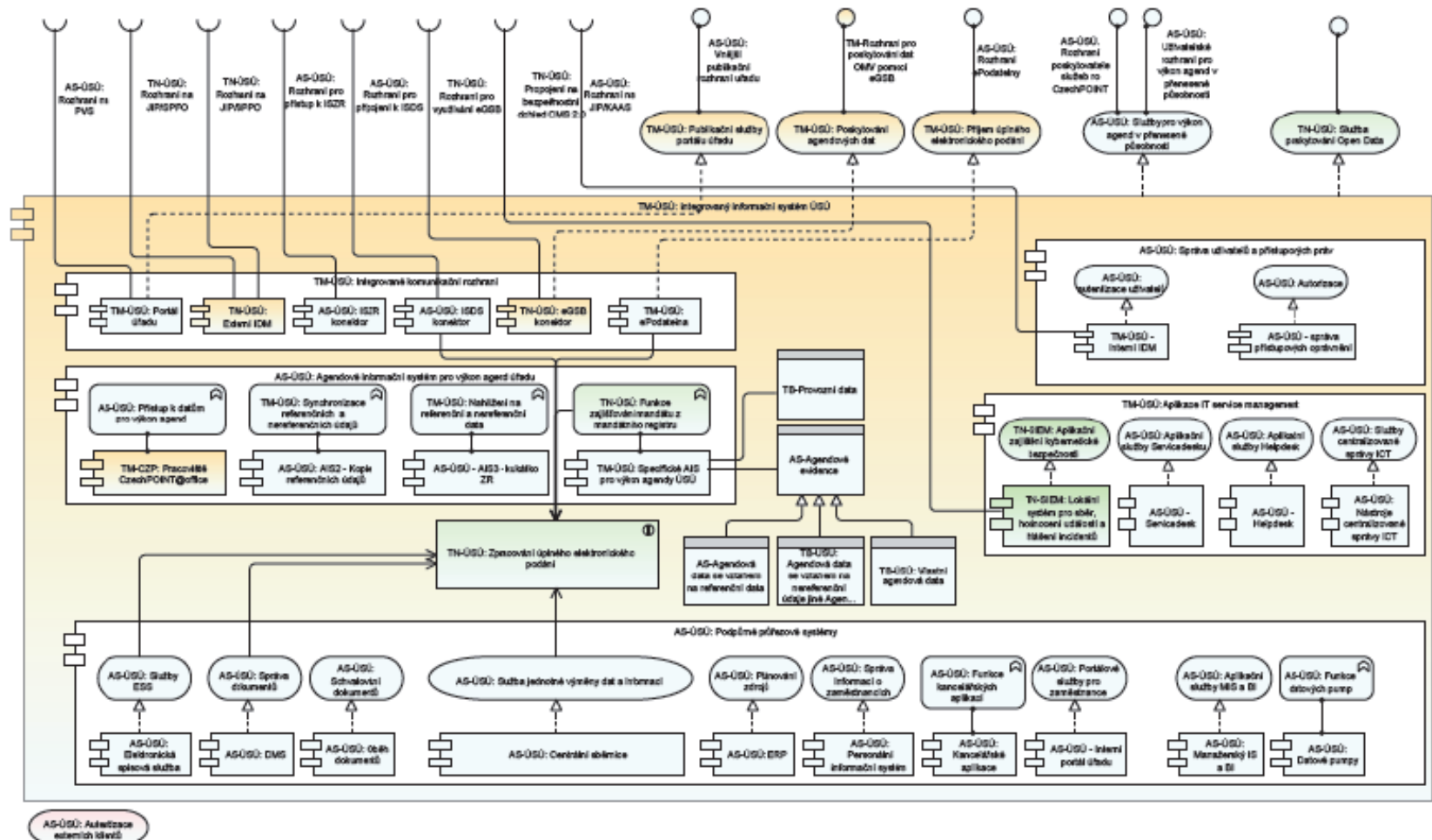# The Development of eGovernment in the Czech Republic: Lessons, Challenges and Future Prospects
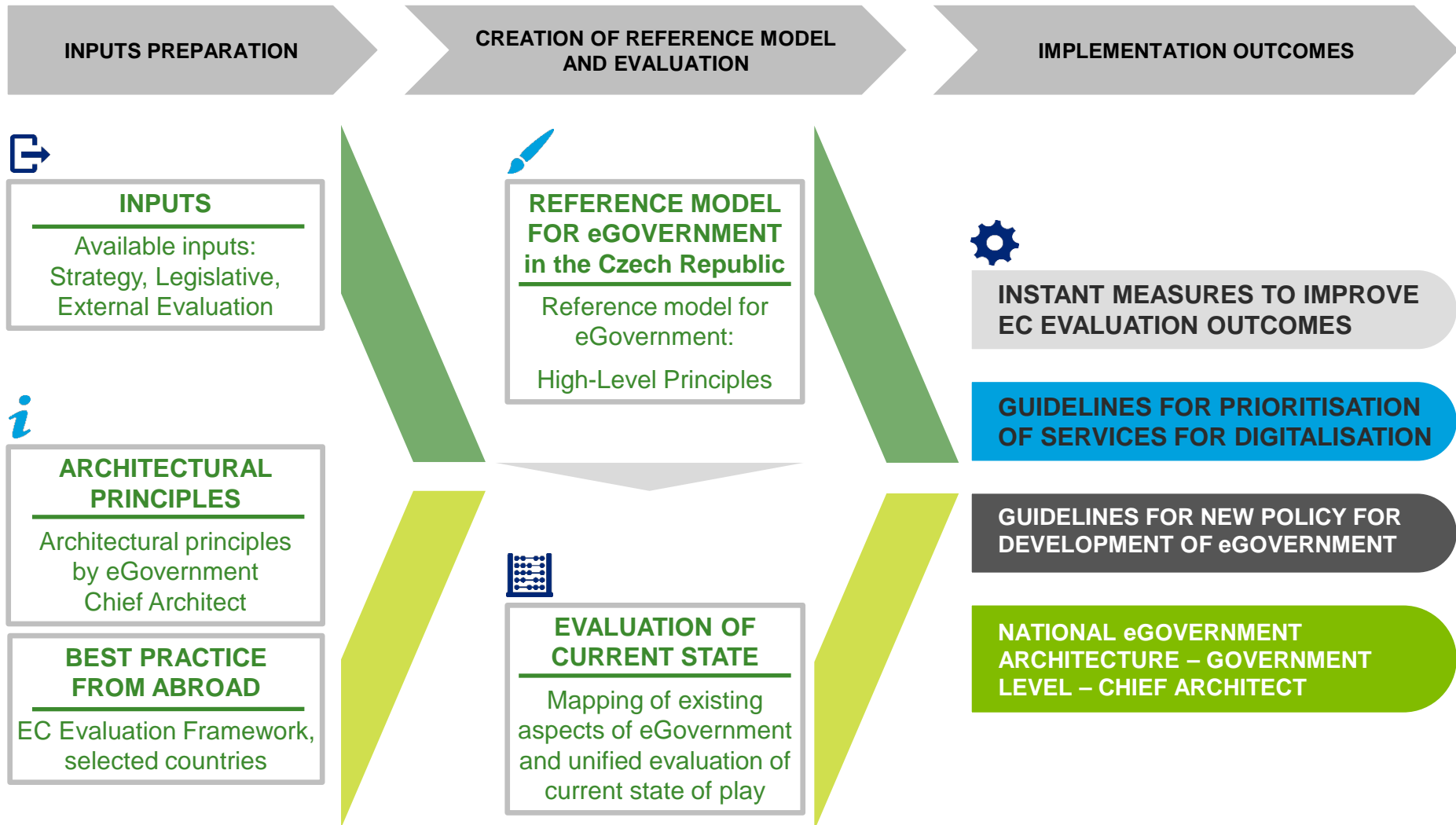
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Ministry of the Interior

TB_USU_RM_AV_L1: Referenční model Ústředí

Implementation outcomes for the development of eGovernment in CZ

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INPUTS PREPARATION

CREATION OF REFERENCE MODEL AND EVALUATION

IMPLEMENTATION OUTCOMES

INPUTS
Available inputs: Strategy, Legislative, External Evaluation

ARCHITECTURAL PRINCIPLES
Architectural principles by eGovernment Chief Architect

BEST PRACTICE FROM ABROAD
EC Evaluation Framework, selected countries

REFERENCE MODEL FOR eGOVERNMENT in the Czech Republic
Reference model for eGovernment:

High-Level Principles

EVALUATION OF CURRENT STATE
Mapping of existing aspects of eGovernment and unified evaluation of current state of play

INSTANT MEASURES TO IMPROVE EC EVALUATION OUTCOMES

GUIDELINES FOR PRIORITISATION OF SERVICES FOR DIGITALISATION

GUIDELINES FOR NEW POLICY FOR DEVELOPMENT OF eGOVERNMENT

NATIONAL eGOVERNMENT ARCHITECTURE – GOVERNMENT LEVEL – CHIEF ARCHITECT

Inputs

The key condition before defining a new policy for the development of eGovernment in the Czech Republic is the realisation of analyses of current state-of-play in all dimensions. The following inputs have been subject of analysis:

- **Strategic definition of current and future direction of eGovernment** – Strategic Framework for the Development of Public Administration, GeoInfoStrategy and others; total of 30 Strategies;

- **Legal delimitation of eGovernment** – set of general legislative and regulative texts concerning eGovernment; total of 80 regulations;

- **Implementation projects** – set of projects contained in e2020 analytical outcomes; total of 200 projects;

- **External evaluation of eGovernment in CZ** – outputs of comparison at European and global level; total of 6 independent evaluation reports;

- **Overview of public administration services** – public administration services reflected in the overview provided by the Public Administration Portal – based on the concept of life situations; total of 450 unique services.

Foundations for the creation of eGovernment reference model

Initial needs	A single and unified measuring approach is needed for a meaningful comparison of the state-of-play of different aspects of eGovernment (strategic definition, legal regulation, implementation projects, public administration services, and external evaluation by EC). To achieve this, a reference model for eGovernment has been created that defines a set of key principles to be fulfilled within eGovernment in the Czech Republic. The different aspects can be mapped on these key principles as well as the contribution of particular aspects to fulfilling the principles can be assessed.
Genesis of the reference model	The reference model has not originated from a greefield. The defined high-level principles are found in similar conceptual models used in countries that are considered leaders in the area of eGovernment. The principles have been further elaborated in order to comply with the European Commission evaluation frameworks, with the national eGovernment architecture currently in development, and with the principles found in up-to-date national strategies and policy frameworks.
Output	8 high-level principles for eGovernment in the Czech Republic structured according to the TOGAF standards (Statement: content of a principle; Justification: reasons for Statement; Impact: practical actions to fulfill Statement) plus the dimension of objective competences according to the Competence Act.

Situating the reference model in the context of existing policy principles

Context of the reference model – the following sets of external principles are used as key inputs for the development and testing of the reference model:

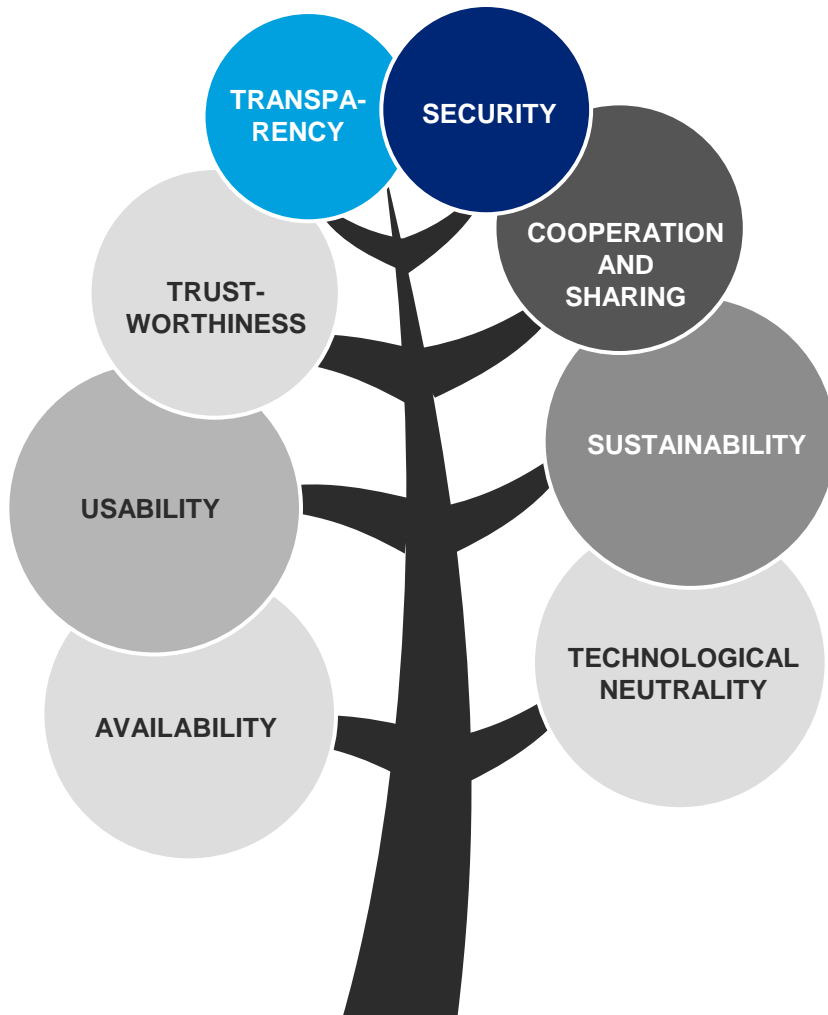| **ARCHITECTURAL PRINCIPLES**	**BEST PRACTICE FROM OTHER COUNTRIES**	**EUROPEAN COMMISSION EVALUATION CRITERIA**
National Architecture of eGovernment, currently developed by the Chief Architect (enterprise, architectural and methodological approaches)	National eGovernment principles found in advanced national contexts (e.g. Austria, Great Britain, New Zeland and others)	eGovernment Benchmarks measured by the European Commission

8 high-level principles of the reference model

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3 aspects of each principle

TRANSPA-RENCY

SECURITY

TRUST-WORTHINESS

COOPERATION AND SHARING

USABILITY

SUSTAINABILITY

AVAILABILITY

TECHNOLOGICAL NEUTRALITY

STATEMENT – content of the principle. Giving concise and unambiguous information on basic rules defining the principle.

JUSTIFICATION – reasons for the principle. Highlighting the benefits brought by the principle, ties to other principles, including explanation and examples of the outcomes of the principle in practice..

IMPACT – concequences of adopting and implementing the principle.

High-level principles:
key rules and guiding ideas
for the development of eGovernment

Principle	Statement
Availability	Public administration services must be available to everyone, primarily in **electronic mode**, at any **time**, in any **location**, and they must be provided in a **non-discriminatory and barrier-free** way.
Usability	Public administration services delivery must be always designed with regard to **client needs** – in order for the citizen to be able to administer her life situation in its complexity through electronic means (**on-line**, **off-line** or **assisted**).
Trustworthiness	Electronic services of public administration (on-line, off-line, and assisted) must be designed in such a way that the clients have full trust in their using.
Transparency	Acquisition, development and operation of public administration services must be always realised in a **transparent manner**. Public information owned by public administration bodies must be published, ideally in an open data format, unless prevented by special legislation and national security reasons. Operation of public administration must be subject to **continuous audit and evaluation**, and results are to be published openly.
Security	Electronic services (on-line, off-line, and assisted) must ensure **adequate level of security** for data contents, for access to data, and for service provision and usage.
Cooperation and Sharing	Electronic services of public administration are designed and built primarily on the principle of **cooperation and sharing of information and resources** among public administration bodies.
Sustainability	**Acquisition** of new means for providing public administration services must always be **justified**, and the services must be designed with regard to **long-term usability**.
Technological neutrality	Public administration services must be conceived as **technologically neutral and platform-independent**, and must **not rely on a limited group of suppliers**.

- **The reference model contains other dimensions** – The principles are linked to extensive justifications and practical impact descriptions, and are unambiguously mapped to large numbers of other principles and aspects of eGovernment to ensure interconnectivity and unified approach to the current state and future vision of eGovernment in the Czech Republic.
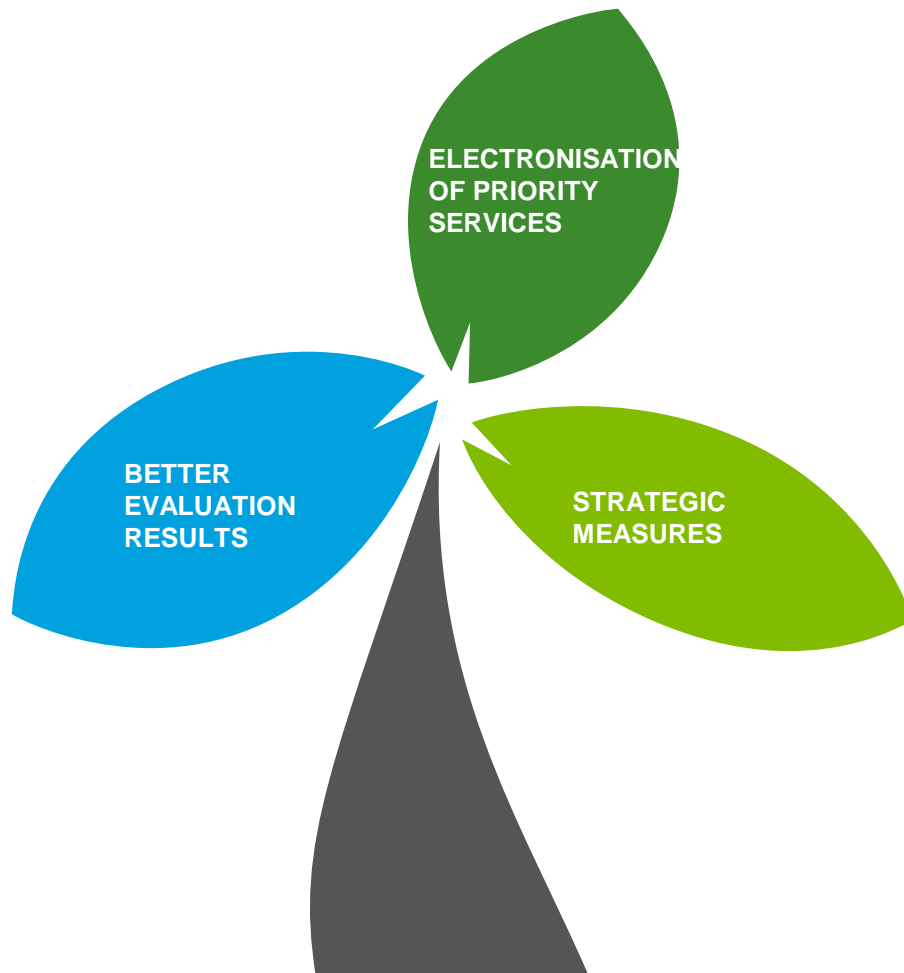
Assessment of the current state-of-play of eGovernment in CZ

- **Mapping methodology** – Assessing the extent to which key dimensions of eGovernment contribute to fulfilling the high-level principles of the reference model (i.e. assessing strategies, legislation, projects, and service provision)

- **Mapping outcome** – Specific „Coverage Maps" will be created for each dimension, reflecting the coverage of the high-level principles

- **Initial key conclusions** can be formulated based on the findings already available:

  - **Strategy** – Strategic materials are focused on **specific areas of eGovernmentu** and aim to fulfill **merely small parts of the high-level principles**. The country **lacks an umbrella level of policy** for the development of eGovernment.

  - **Legislation** – Specific regulations create sufficient conditions for a **particular fulfillment of the principles**, on the ohter hand the legal framework is **not sufficient for complete fulfillment of the principles**. Especially lacking is umbrella legislation to stipulate **legal equivalence between manual and digital administrative acts**.

  - **Implementation projects** – **Unavailability of complete and structured database of project inputs and outputs** virtually **prevents** the realisation of **detailed analysis,** and limits significantly the possibility for a **general supervision** over **implementation projects** and their outputs. It can be concluded, however, that projects frequently **focus on technical dimensions** while **neglecting** the necessary aspects of **promotion**, **motivation** and support to **adoption** of newly developed services. Also, along with the introduction of digital services it is rarely the case that the original non-electronic services are sidelined consequently. Thus, the complexity of the system only grows, as do the costs of operation.

  - **Public administration service provision** – **A large majority of public administration services are not yet (fully) digitalised**, and those that are digitalised lack in promotion and motivation-building. **Frequently lacking** is also the **electronic form of substantial services** than are often selected as **referential** services in evaluation of EU member states' advancement in eGovernment.

Focus of further development in eGovernment: 3 basic directions

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ELECTRONISATION OF PRIORITY SERVICES

BETTER EVALUATION RESULTS

STRATEGIC MEASURES

BETTER EVALUATION RESULTS

Drawing inspiration from the EC Evaluation Framework for eGovernment in EU Member States, and applying the benchmarks at the national level (i.e. by reflecting the benchmark indicators in national projects' indicator frameworks).

Conducting systematic analysis and follow-up improvement of CZ eGovernment according to EC evaluation.

ELECTRONISATION OF PRIORITY SERVICES

Focusing on **electronisation of priority services** for citizens and businesses following the EC-used list of referential services.

STRATEGIC MEASURES

Realising measures following from identified recommendations and reflecting them within a **new policy for the development of eGovernment**.
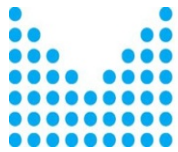
Key components

Key components of eGovernment successfully implemented:

- **Data Boxes Information System**
universal and centrally guaranteed communication tool to facilitate electronic exchange of information between public administration and its clients

- **CzechPOINT - public administration contact points**
one-stop-shops for clients of public administration

- **Public Administration Portal**
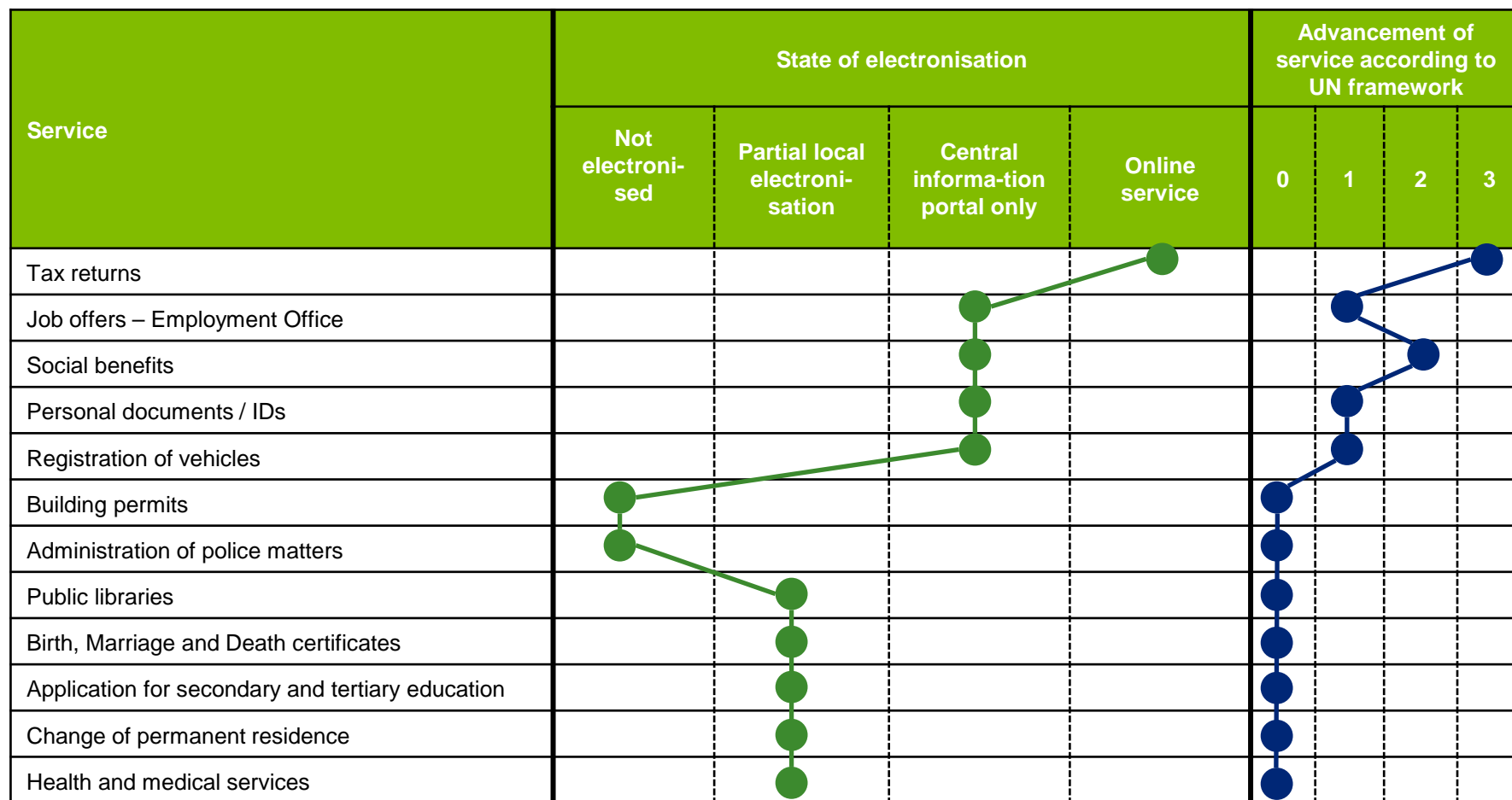electronic gateway for citizens to public administration services, forms, life situations

- **Basic Registers Information Systems**
public sector reference data source

Critical services in PA according to EC – for citizens

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State-of-play of critical services for citizens – Majority of critical services of public administration focused on citizens are not electronised on national level, or merely online information is available on how clients can solve life situations with authorities in person. Half of the services indicate diverse level of availability of information depending on motivation and aptitude of PA bodies on local level.

Service	State of electronisation				Advancement of service according to UN framework			
	Not electroni-sed	Partial local electroni-sation	Central informa-tion portal only	Online service	0	1	2	3
Tax returns				●				●
Job offers – Employment Office			●			●		
Social benefits			●				●	
Personal documents / IDs			●			●		
Registration of vehicles			●			●		
Building permits	●				●			
Administration of police matters	●				●			
Public libraries		●			●			
Birth, Marriage and Death certificates		●			●			
Application for secondary and tertiary education		●			●			
Change of permanent residence		●			●			
Health and medical services		●			●			

Advancement of services: 0 not applicable, no electronisation of service   2 extended electronic service
1 emerging electronic service   3 transaction service

Critical services in PA according to EC – for businesses

State-of-play of critical services for businesses – Majority of critical services of public administration focused on businesses can be seen as electronised on central level. However, some situations still represent a considerable administrative burden on the side of companies due to the complexity of the processes involved.

Service	State of electronisation				Advancement of service according to UN framework			
	Not electroni-sed	Partial local electroni-sation	Central informa-tion portal only	Online service	0	1	2	3
Employee benefits				●				●
Income tax (legal persons)				●				●
Value added tax				●				●
Starting a business			●				●	
Submitting information to the Statistical Office		●					●	
Customs				●				●
Emission permits				●				●
Public procurement			●			●		

Advancement of services: 0 not applicable, no electronisation of service · 1 emerging electronic service · 2 extended electronic service · 3 transaction service

Key recommendations 1/5

Area	Recommendation
EC evaluation	Deal systematically with analysis and follow-up improvement of the image of Czech eGovernment in the European Commission evaluation and benchmarking.
EC evaluation	**Draw inspiration from the EC evaluation framework** for eGovernment in Member States and apply in at the national level (e.g. by reflecting the framework in measurable indicators for national eGovernment projects).
Legislation	Implement an **umbrella legal framework for eGovernment** by brining into force general regulations to stipulate rules for the **equivalence between manual and electronic administrative acts**.
Overall policy	Better **operate the entire life-cycle of electronic services in public administration** (strategy-legal acts-projects-services) so that particular steps directly follow one another and remain consistent with the principles of eGovernment throughout the life-cycle of the service.
Overall policy	Link **electronisation of services** in public administration with **optimisation** of the services. New forms help to promote new contents.
Availability	All PA bodies must ensure **universal access to the Internet** and to online services. Development of new electronic services must be followed by **replacement (sidelining)** of the equivalent traditional, non-electronic services.
Availability	New services must be designed with regard to **principles of availability**. **An alternative social interface** must always be provided in order for citizens with special needs or with a lack of digital competence to be able to submit all inputs in a way that leads to an end equal to online submission.
Availability	Clients must be able to **bring their matters** to public administration **in fully electronic way,** without regard to their place of permanent residence, and without the need for a consequent submission of hard copy documents.

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Area	Recommendation
Availability	All new or innovated services of public administration must be equally available via **any communication channel provided by public administration authorities.** This could mean electronic online access via the Public Administration Portal and CzechPOINT@Home, off-line electronic submission via Data Boxes, as well as assisted submission with the support of PA offices providing the CzechPOINT contact point services. Additionally, services can be available on local offices websites or in physical client-oriented offices with the condition that an assisted manual submission is followed by fully electronic processing of the service with no hard copy documents present, with the exception of communication with clients with no access to digital means or with a lack of digital competence.
Availability	The **adoption** of electronic services must be supported by relevant **motivation mechanisms**. Electronic PA services must always be **promoted** effectively and proactively.
Usability	The design of services must include **performance indicators to measure their quality.**
Usability	Services must be designed in such a way that all procedures therewithin are **comprehesible**, services are **easy and quick to use**, utilising **intelligent, interactive forms** with automatic filling-in of available information, containing online support to financial transactions, and leading to automatised processing of client-provided information.
Usability	Particular services must always be designed with regard to a broader concept of provision of services of similar type, to ensure **uniform design and internal consistency**. For example, all services linked to insurance should have unified logic of provision regardless of the specific type of social, health or other insurance.
Usability	All PA communication channels must provide office-based navigation as well as life situation-based navigation that is independent of office localisation **(transversal principle).**
Usability	To ensure re-usability, it is important to ensure that both citizens and public administration authorities have access to **complete history of mutual interaction**, to complete overview of **past dealings** linked to life situations, and to an **archive** of all relevant **documents and proceedings**.

Key recommendations 3/5

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Area	Recommendation
Usability	Services must enable their users to **provide feedback on the actual usability** of the services, and should be designed and developed with regard to information so obtained.
Usability	To improve the user-friendliness of electronic services, a logically structured, objective and interactive **helpdesk and user support** must be available.
Trustworthiness	Electronic documents must contain a means of **verification of their originator and of the invariability of their content.**
Trustworthiness	Mutual exchange of information between a client and a PA authority, and among PA authorities, must be **reliable, accurate, relevant, and up-to-date.** The process design and information management of the services must be developed accordingly.
Trustworthiness	Sender of information must be **certain**, that the information is **delivered**, or that it shall be **regarded delivered by the law**.
Trustworthiness	It is necessary to speedily build a **single secure identity space** for PA clients and amend related regulatory acts so that **using electronic identity is legally equal to using traditional means of proving identity**.
Trustworthiness	It is necessary to adapt legal acts as well as practical procedures to recognise **the equality between signed hard copy documents and their electronic versions**, including internal data syntaxes in infromation systems.
Security	The provision of online services must be accompanied with the definition of **adequate security standards and principles for controlling the adherance to the standards and their enforcing.**
Security	Also ensured must be **adequate protection of personal information** and **classified contents**.
Security	Services must always be subject to **audit**, and they must enable using authorised **tracking system**.

Key recommendations 4/5

Area	Recommendation
Cooperation and Sharing	New services must be developed as **universal and shared**, without limitied ties to specific PA agendas.
Cooperation and Sharing	Public administration must, in cooperation of different authorities, **define a common vision for public service provision** in content-related dimension as well as technological one. The vision must be reflected in common standards.
Cooperation and Sharing	Public administration services must be **provided generally and must be independent of branch, subject-matter and local affiliation** of client-oriented contact points at offices.
Cooperation and Sharing	The formulation of requirements for future development of services must be realised **in cooperation of subject-matter oriented officers with technical specialists.**
Cooperation and Sharing	Offices providing particular public administration services must be **transforned into Assistance Centers** and be able to provide a **complex scale** of public administration services.
Transparency	When developing conceptual and strategic policy materials in the area of public administration service provision, authors must always include **principles of public feedback and consultation**, as well as introduce mechanisms to take account of thus obtained information in policy materials.
Transparency	New services must always be designed with regard to the requirement of **publication of open data** information in appropriate formats.
Transparency	The public must be provided with **access** to outcomes of realised **audits of public administration service provision** and other **evaluation activities.**
Sustainability	The creation of **new PA services** must be justified by a **well-founded need**, and must be **in accord** with the **national architecture of eGovernment**.

Key recommendations 5/5

Area	Recommendation
Sustainability	The first step shall always be **the assessment of usability of existing solutions**, ideally **shared** ones. Only after such assessment it becomes possible to acquire and/or build new services. The costs of the new services must be justified by **the benefits** these services provide.
Sustainability	**Acquisition** of a new shared service is always preferrable to a development of an own one, and services shall always be acquired as **shared** services.
Sustainability	A concept for introducing new services must, in relevant cases, build on **good practices found in both domestic and foreign examples** from both public and private sector.
Sustainability	It is necessary to assign unambiguous **content-related as well as technical responsibility** for all newly introduced services to clearly defined stakeholders.
Sustainability	Services must always be built as **modular, integratable, scallable, parametrical, further extendable, and supportable.**
Technological neutrality	Proposals for technical solutions of services must respect adequate **technological standards in accord with the national architecture of eGovernment.**

Thank you for your attention.

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