

Towards an Evaluation Plan for Integrated Public Service (IPS) Provision

Towards an Evaluation Plan for IPS

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Public Authorities increasingly provide Integrated Public Services (IPS) using co-creation approaches and new technologies. To further support public authorities, the European Union is funding, within the Horizon 2020 (H2020) Programme, the inGov project aiming to advance work on IPS and public service co-creation by employing new technologies, particularly mobile and chatbots. The project results will be deployed and evaluated by public authorities in four EU Member States and these results need to be properly evaluated. The aim of this paper is to present the evaluation strategy and methods to be used for evaluating the results of inGov project. More specifically, three iterations of pilot implementations are planned with each one following a cycle of Plan – Implement – Analyse actions. Overall, three types of evaluators will be involved in inGov evaluations: pilot partners; pilot stakeholders, i.e. public employees, citizens, businesses, NGOs; and domain experts. Six evaluation dimensions will be pursued to cover all project's results, which are technical, organizational and policy-related.

CCS CONCEPTS •Applied computing~Computers in other domains~Computing in government~E-government

Additional Keywords and Phrases: Integrated Public Service (IPS), Evaluation, inGov project

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1 H2020 inGov Project Overview

The vision of the H2020 inGov project is to enable European public authorities (PAs) to co-create user-friendly Integrated Public Services (IPSS) accessible via mobile devices to all, particularly the disabled, resulting in increased adoption, efficiency, effectiveness, trust and satisfaction [1]. The main aim is to support IPS co-creation and delivery. The focus is on exploiting co-creation methods and the wide adoption of mobile devices to reap the benefits of eGovernment principles.

The main results of the inGov project are:

- Enhancement of the Core Public Service Vocabulary EU data model [2] to accommodate complex public services and feedback mechanisms [3]
- Enhancement of the European Interoperability Framework IPS Conceptual model [4] to include co-creation mechanisms
- Development of a comprehensive IPS Holistic Framework to assist public authorities in adopting IPS co-creation mechanisms
- Development of IPS reference architecture (which is compatible with the European Interoperability Reference Architecture [5]) and technological artefacts to support the IPS holistic framework
- Development of a sustainability plan to safeguard the long-term use of the IPS framework and preparation of policy recommendations for enhancing existing EU work with our findings.

In addition, inGov project will deploy, operate and evaluate these results in four EU member states, namely Malta to modernise the digital family household public service, Austria to deploy IPS for collecting tourism tax, Greece to digitise the disabled card renewal service and Croatia to create AI-driven virtual assistants and services.

Finally, inGov project will evaluate citizens' satisfaction and increase in trust in public institutions. Additionally, it will contribute to establishing a culture of co-creation and co-delivery, transparency, accountability and continuous consultation. The project aims to feed its results back to EU policies hence achieving alignment between policies, research and practice.

2 H2020 inGov project pilot Implementations

H2020 inGov project has planned three iterations of pilot implementations until the project's end. Each iteration will follow a cycle of Plan – Implement – Analyse actions as presented in [Figure 1](#) below. In specific, for each pilot iteration we will:

1. *Plan*. Planning refers to preparing the ground for the pilot implementation, e.g. exploring and clarifying aspects of the pilots, planning the co-creation piloting activities, planning for pilot's evaluation, securing ethical compliance, etc.
2. *Implement*. Implementation refers to the actual conduct and evaluation of piloting activities, i.e. preparing the details for pilots' implementation, rolling out the piloting activities, gathering feedback for evaluation, etc.

3. *Analyse*. Analysis refers to documenting and exploring the results of the pilot implementation, e.g. reporting on the co-creation piloting activities, analysing the gathered feedback, assessing the success of the piloting activities, extracting lessons learnt, etc.

The results of the first pilot iteration will be used as input to the second iteration and the results of the second pilot iteration will be used as input to the third iteration, so that each pilot cycle gains from the lessons learnt and has the potential to become planned, implemented and analysed in the optimal way. The current paper presents the evaluation plan of the first pilot iteration which will be refined during the following iterations.

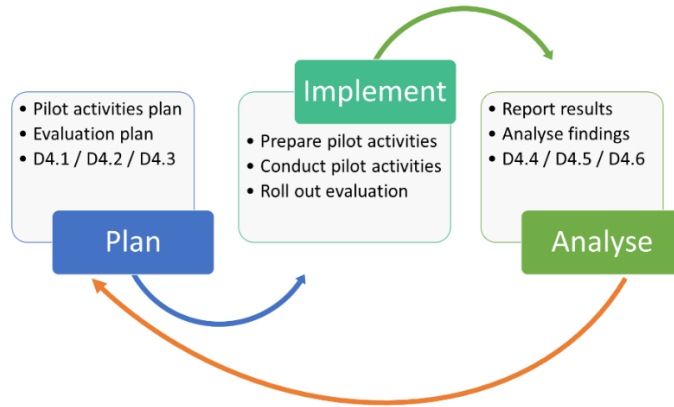


Figure 1:H2020 inGov project cycle of piloting activities

3 H2020 inGov project evaluation

This section presents an overview of the evaluation strategy for the inGov project.

3.1 Evaluation Strategy

The strategy for the inGov project evaluation considers five key aspects ([Figure 2](#)) as follows.



Figure 2:H2020 inGov project evaluation strategy

Evaluation periods. The inGov project has planned three distinct pilot implementation iterations. Based on that, the overall evaluation duration is split into three distinct evaluation periods.

Project results. The inGov project evaluation scope includes evaluations of all developed models, methods, tools and all four pilot applications, i.e. the enhanced CPSV model; the IPS-Co model; the IPS holistic framework; the IPS reference architecture and tools; and the four inGov project pilot implementations in Malta, Croatia, Greece and Austria.

Stakeholders. Different types of stakeholders will be involved depending on the result to be evaluated. Based on the involved stakeholders, we distinguish two main evaluation categories:

- a. The evaluations performed by pilots. Pilots' evaluation refers to the application of the inGov project results in each pilot site, and may be performed by the pilot partners themselves or other stakeholders involved in each pilot, e.g. public employees, citizens, businesses, etc.
- b. The evaluations performed by external experts, e.g. field experts and academics. Experts' evaluation refers to project's scientific results and the acceptance of these results from the scientific community. This evaluation is a process that is external to the project, i.e. it does not take place within certain inGov project tasks but during dissemination of project's results to the scientific community, i.e. during peer reviewing by scientific journals, during presentation at scientific conferences, etc.

Evaluation setting. Evaluations will be performed at different settings, depending on the involved stakeholder types, their preferences, circumstances, etc. In specific:

- a. Pilot evaluations may be performed during piloting activities, e.g. meetings, workshops, focus groups, and also via surveys and interviews. The evaluation setting will be decided according to the needs of each pilot and the objectives and activities of each piloting phase. Pilot evaluations will mainly happen during the pilot implementation activities as that is an excellent opportunity with a broad range of stakeholders already engaged in contributing to the pilot.
- b. Expert evaluations may be performed at conferences, webinars, workshops, focus groups and via publications to scientific journals and proceedings; overall, at any setting where interaction with domain experts takes place.

Evaluation models and tools. The evaluation strategy will utilise models and tools that will be designed specifically for the needs of the inGov project. To this end, existing models, theories and tools will be examined and adopted or adapted accordingly. Whereas, in the absence of existing models and tools, inGov project will construct its own tools to perform the relevant evaluations. As inGov project has ambitious goals as regards the scope of pilot evaluations, we foresee six different dimensions for the pilot evaluations– these are presented in more detail in the next section.

3.2 Evaluation Dimensions

Overall, there are six evaluation dimensions we will pursue in the inGov project ([Figure 3](#)):

1. Evaluation of enhanced CPSV and IPS-Co models that will be developed during the project;
2. Evaluation of IPS holistic framework;
3. Evaluation via Interoperable Europe methods and tools (e.g. IMAPS, IQAT etc);
4. Evaluation of co-creation;
5. Evaluation of the inGov project platform & tools; and
6. Evaluation of pilots' impact;

involving three different groups of evaluators:

1. Experts, i.e. domain experts, academics, practitioners, etc., external to the inGov project consortium;
2. Pilot partners, i.e. the four public administrations participating in the inGov project consortium; and
3. Pilot stakeholders, i.e. public employees, citizens, businesses, etc., who will be approached by the pilot partners.

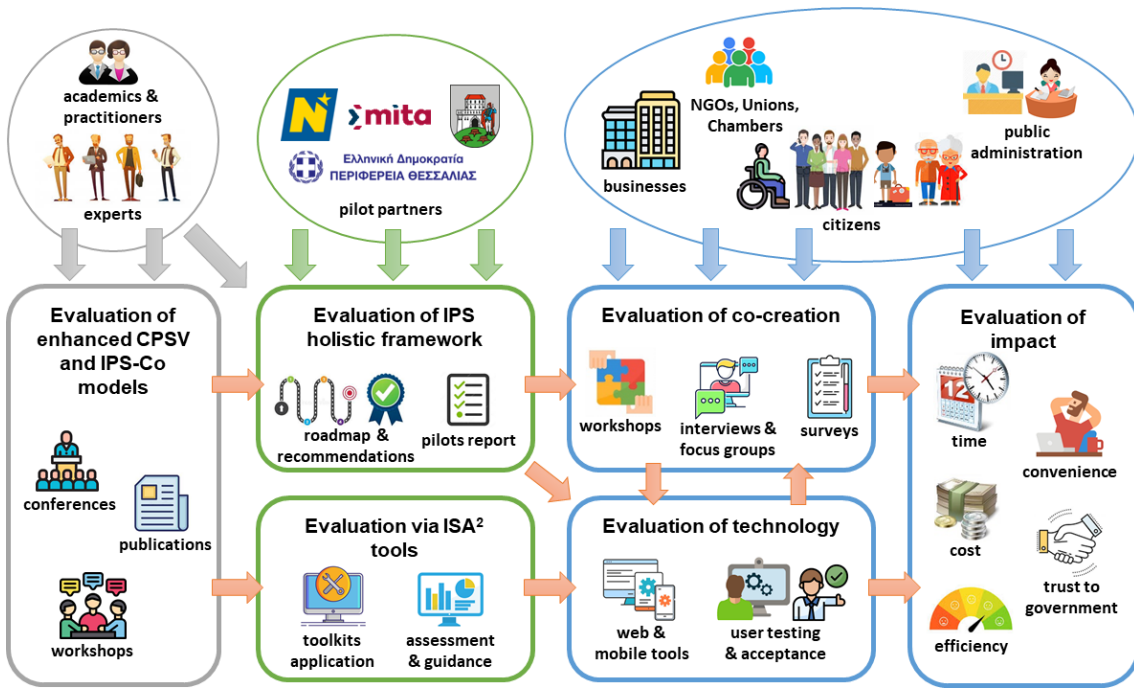


Figure 3: H2020 inGov project evaluation dimensions

As shown in [figure 3](#), the first dimension, i.e. the evaluation of the enhanced CPSV model and IPS-Co model will be performed fully via experts' evaluations. The second and third dimensions will be performed by the pilot partners as the owners and implementers of each pilot. The last three dimensions will be performed via the pilot implementation activities that will be performed during each pilot iteration and the evaluators will be the stakeholders of each pilot, i.e. citizens, businesses, public employees, etc.

4 Conclusions and Future Work

This paper presented the inGov project's evaluation strategy and plan. In specific, we described the overall approach to be used for evaluating the project's results as well as the different evaluation dimensions that will be examined for capturing the whole spectrum of evaluations. Overall, three types of evaluators will be involved in the inGov project evaluations: pilot partners; pilot stakeholders, i.e. public employees, citizens, businesses, NGOs; and domain experts. All these evaluators will be involved in the evaluations for the first evaluation period. In specific, pilot stakeholders will be involved in evaluations during the planned piloting activities of the first pilot iteration; pilot partners will be involved via internal evaluation of the IPS holistic framework and the pilots' implementations via Interoperable Europe tools; and domain experts will be involved via scientific results' dissemination activities such as journal articles publication, conference presentations and workshops.

Following, the planned activities will be performed in each pilot site and the results will be recorded. It is expected that this upcoming first iteration of pilot implementation will solidify the IPS co-design so that the second and third pilot implementation will focus on applying the interim and final versions of the inGov project's platform and tools. The evaluation results will be used as inputs for refining the evaluation plan, models and methods for the next evaluation period.

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