

# Pitfalls at the Starting Line: Moldova's IVS Pilot

Radu Antonio Serrano Iova<sup>1</sup>

**Abstract:** The Republic of Moldova has been interested in internet voting since 2008. However, it is only now that preparations are currently ongoing to pilot an internet voting system (IVS) for its future use in elections. In this short paper, we explore the current endeavors to set it up, through the perspective of the Mirabilis of IVS failure, in order to identify current pitfalls that are affecting the process, and that could still be addressed in time.

**Keywords:** Moldova; Internet Voting; Convenience Voting

## 1 Introduction

The Republic of Moldova has been interested in automating elections since 2008, when a corresponding law was passed. However, the interest on this endeavor fluctuated throughout the years. It was only recently that the concrete actions have been actively undertaken to move forwards with the piloting of an internet voting system (IVS). This short paper presents Moldova's efforts and explores them through the Mirabilis of IVS failure. While Moldova's Internet Voting Project cannot yet be categorized as either success or failure, the Mirabilis is solely used as a tool to identify current pitfalls that are affecting the process and that could still be addressed in time.

## 2 The Republic of Moldova and i-Voting

The Republic of Moldova is a landlocked country bounded by Ukraine and Romania. It has a population of 2,6 million inhabitants [Mol23] and has a diaspora between 1,11 and 1,25 million people (according to 2021 data) [Mak21]. Primarily because of this last number, the applicability of distance voting was researched in 2007. Back then, the diaspora was smaller (comparatively to the 2021 data) but still accounted for 1/3 of the country's population. The study presented the possibility of voting by traditional mail, via the Internet, and via SMS or PDA. However, in addition to the lack of legal framework in all three cases, technological, organizational and societal constraints affected the two electronic methods [CG07]. In May 2008, the Parliament of Moldova passed Law 101

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<sup>1</sup> Tallinn University of Technology, Ragnar Nurkse Department of Innovation and Governance, Akadeemia tee 3, 12618 Tallinn, Estonia raduantonio.serranoiova@taltech.ee

which adopted the concept of the Automated State Information System 'Elections' and mandated the Central Electoral Commission (CEC) to develop, regulate and implement it, and the Government to finance it, assist the CEC and develop and implement the corresponding legislative frameworks [Mol08]. The system was conceived for the purposes of automating the processes of preparing, conducting and totalizing the results of elections and referendums, with the first focus being the numbering of the votes until the corresponding legal, technical and organizational frameworks were developed and put into place for the rest of the responsibilities[Mol08; VG18]. Since then, many technical building blocks for internet voting were legislated, developed and implemented (due to so many of them being also relevant to the digitalization endeavors of the country, e.g. digital registries, digital identity, identification and signatures, data protection, e-ID cards, e-Government solutions, etc.) [VG18]. However, they still need to be interconnected for an election, and the IVS is also missing. That's where Moldova's Internet Voting Project comes in. In 2019, the CEC's strategic 4-year plan included concrete steps to develop an IVS. In December 2021 a first Interinstitutional Working Group (between govern-mental entities, like the CEC, the Ministry of Justice, the Public Services Agency, among others, and Civil Society Organizations) was created to develop the IVS Con-cept (I-1, I-2). This document includes the description and implementation method of the IVS in the electoral process, defines its basic notions and describes the basic principles that the IVS must follow. It also contains, as an Annex, proposed amendments to the electoral code [Com22]. With the approval of this concept, the CEC was allocated funds by the Parliament by October 2022. A second Interinstitutional Working Group (similar in composition to the first one, except for the Ministry of Justice) was created to oversee the implementation of the IVS, which includes drafting the specifications, contracting the corresponding company that will create the system, and piloting the IVS (I-1). The specifications were unveiled for public consultation in March of 2023. As of the writing of this short paper, the final specifications have not been published, and no progress appears to have been made in the search for the corresponding vendor to create and pilot the IVS.

### **3 Methodology**

Data collection for this short paper took place between January and May 2023. During this period, multiple visits were conducted to Chisinau. Most of the interviews were conducted during these visits, with some in another country, to reach out to Moldova's voting diaspora. A total of 5 semi-structured interviews were carried out with the CEC, representatives of Civil Society Organizations (CSOs), a member of the Moldovan diplomatic corps and a citizen living outside of Moldova (see Table 1). The CSOs interviewed were the ones actively participating in the Interinstitutional Working Groups. The author also attended online two internet voting awareness events that the authorities of Moldova held for their citizens in February and March 2023.

The data was analyzed using an inductive approach consisting of identifying the core components of the Mirabilis of IVS failure (e.g. stakeholders, IVS, project organization,

Number	Occupation	Date
I-1	Deputy Head of the CEC	February 2023
I-2	Representative I of CSO	March 2023
I-3	Representative II of CSO	March 2023
I-4	Moldovan Ambassador	March 2023
I-5	Citizen outside the country	March 2023

Tab. 1: List of interviewees, anonymized.

context dimensions) and the relationships between them. The Mirabilis of IVS failure was introduced to analyze the failed implementation of Internet Voting Project of the Åland Islands [Da20]. Moldova's Internet Voting Project is still in development and cannot be categorized as a success or failure, yet. The Mirabilis is used as a tool to identify the current pitfalls that are affecting the process and that could still be addressed in time for the successful implementation of internet voting in Moldova.

## 4 Analysis

The CEC's vision is the adaptation of the Estonian model, i.e. IVS implementation for the whole country (I-1). However, the benefit will be felt primarily by the diaspora (I-1, I-2, I-3, I-4, I-5). The pilot IVS will not have any legal validity, will be conducted outside any electoral cycle and will only be available for those having a valid digital ID and/or signature (I-1). Applying the Mirabilis, the context seems contain multiple pitfalls for IVS implementation. The technological dimension is severely lacking in regard to the national adoption of a digital national ID card and signature. Seven percent of the population is able to identify themselves digitally (I-1), but the cost-benefit does not make it attractive to the population [VG18]. Regarding the law dimension, the electoral code does not contain articles on internet voting. A draft of the changes was attached to the IVS Concept, and it is planned to amend it by the time the pilot of the IVS (I-2), but due to the characteristics of the pilot, this step seems like a recommendation and not a necessity. The political dimension is lacking an official attitude toward internet voting. On one hand, the Parliament allocated the budget for the development of the IVS pilot, but on the other, members of the Parliament ignore invitations to workshops and discussions on the topic (I-1, I-2, I-3). On the societal dimension, the level of citizens' trust has not been effectively measured, and it is being put to the test by the war next door (I-4) and the Transnistria breakaway region. Regarding the elephant in the room/Mirabilis, the IVS has not yet been developed. After the completion of the final specifications, a public international bid will be launched to find and select the IVS supplier. The project organization is effectively being managed by the CEC and the Interinstitutional Working Group (I-1, I-2, I-3). The two member CSOs are actively participating in the implementation of the IVS. However, the rest of the stakeholders do not seem to be interested in the process. People only seem interested in elections when one is

approaching (I-3, I-4). Nevertheless, the CSOs and the CEC have been actively trying to inform the citizens, via media campaigns and their two public events (I-1, I-2, I-3).

## 5 Discussion and Conclusion

The context of this whole endeavor is incomplete. All the dimensions are lacking key items that are necessary for the successful implementation of an IVS. If these are ignored, possibly due to this being a pilot IVS and not the real deal, the failure of the pilot would set back or even annihilate any possibility of future IVS implementation in the country. The lacking context also deforms the demands of the stakeholders and might undermine their trust in the electoral process, the IVS and the government. The implementation environment of the IVS pilot seems to be indifferent, with the exception of the people working on it. Politicians, candidates, the media and observers are not willing to be troubled or to be engaged long enough on the topic. Additionally, the requirements for the IVS are primarily coming from the project organization, not from the stakeholders. This might lead to a mismatch between the expectations of the IVS among the stakeholders and the project organization, culminating in a system that does not satisfy the needs of the stakeholders. As it currently stands, there are failures appearing in-between the context and the stakeholders, and them and the project organization. The pitfalls identified should be resolved in a timely manner, since they might lead to the failure of the pilot, and in the long-term, to that of any IVS implementation. Further monitoring of the pilot and future efforts is warranted, to see if Moldova will be able to implement an IVS.

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