

Virtual Conciliation in Colombia: Evaluation of Maturity Level within the Framework of E-Government

Jenny Paola Forero Pachón, Sonia Cristina Gamboa Sarmiento, Luis Carlos Gómez Flórez

Abstract—The Colombian government has defined an e-government strategy to take advantage of Information Technologies (IT) in order to contribute to the building of a more efficient, transparent and participative State that provides better services to citizens and businesses. In this regard, the Justice sector is one of the government sectors where IT has generated more expectation considering that the country has a judicial processes backlog. This situation has led to the search for alternative forms of access to justice that speed up the process while providing a low cost for citizens. To this end, the Colombian government has authorized the use of Alternative Dispute Resolution methods (ADR), a remedy where disputes can be resolved more quickly compared to judicial processes while facilitating greater communication between the parties, without recourse to judicial authority. One of these methods is conciliation, which includes a special modality that takes advantage of IT for the development of itself known as virtual conciliation. With this option the conciliation is supported by information systems, applications or platforms and communications are provided through it. This paper evaluates the level of maturity in how the service of virtual conciliation is under the framework of this strategy. This evaluation is carried out considering Shahkoooh's 5-phase model for e-government. As a result, it is evident that in the context of conciliation, maturity does not reach the necessary level in the model so that it can be considered as virtual conciliation; therefore, it is necessary to define strategies to maximize the potential of IT in this context.

Keywords—Alternative dispute resolution, e-government, evaluation of maturity, Shahkoooh model, virtual conciliation.

I. INTRODUCTION

IN recent years, Colombian government has been promoting the use of IT as part of the organizational culture and a support element in its missionary activities. Proof of this is the implementation of a strategy that promotes the use of IT called *E-Government Strategy at national and territorial Level* [1] to contribute to the construction of a more efficient, transparent and participatory State. One of the components of this strategy includes the provision of user-centered online procedures and services [1] that seek to provide users of usable and accessible electronic channels allowing them to carry out different procedures, receive services and have communication spaces that respond to their needs and expectations. Considering this, it has become evident that one of the sectors of the

government that could benefit from IT is the Justice sector with regard to the backlog of judicial cases. To speed up these processes, the Colombian government has promoted the use of ADR Mechanisms. This is a resource where disputes can be resolved more quickly compared to the judicial process, facilitating communication between the parties without having to resort to a judicial authority. [2]. Conciliation is one of these methods, which presents a special type of modality known as Virtual Conciliation. In this form of conciliation, the procedure is supported by information systems, applications or platforms and communications take place among them [3] and can be offered by authorized agencies. Considering this and being aware of the government's great effort to promote online services, the need emerges to identify the status of Virtual Conciliation in the country. This is done by determining the level of e-government maturity of the agencies, more precisely the Conciliation Centers, which are agencies authorized by the Ministry of Justice and Law to carry out the conciliation process. To evaluate the maturity level of e-government in Colombia, the Shahkoooh 5-phase maturity level model for e-government [4] is used, which presents the same components defined in the Colombian state's e-government strategy.

II. RELATIONSHIP BETWEEN THE COLOMBIA E-GOVERNMENT STRATEGY AND THE SHAHKOOOH E-GOVERNMENT MATURITY MODEL

A. Colombia E-Government Strategy

The manual for the implementation of the online government strategy presents 6 components that group the activities and criteria that public agencies must consider in order to promote the use of technological advances with the purpose of guaranteeing better communication and interaction with citizens.

The implementation of the online government strategy has generated important achievements such as the increase in the provision of procedures and services by electronic means, the improvement of the quality of information of the public agencies in their websites and the opening of spaces for participation [5].

The components of the strategy are derived from the Online Government Phases defined in Decree 1151 of 2008 [6], which established the general guidelines of the e-Government Strategy of the Republic of Colombia. The phases are:

- 1) **Online Information Phase.** It is the initial phase in which agencies set up their own websites to provide

F. P. Jenny Paola, Master Student, G. S. Sonia Cristina, Associate Professor, and G. F. Luis Carlos, Titular Professor, are with the systems and informatics department, Universidad Industrial de Santander, Bucaramanga, SA 680002 Colombia (e-mail: jenny2178186@correo.uis.edu.co, scgamboa@uis.edu.co, lcgomezf@uis.edu.co)

- online information, along with basic search schemes.
- 2) **Online Interaction Phase.** It is the phase in which two-way communication is enabled between agencies and citizens and companies with online requests and interaction with public servants.
 - 3) **Online Transaction Phase.** It is the phase in which electronic transactions are provided to obtain products and services.
 - 4) **Online Transformation Phase.** It is the phase in which changes are made in the way agencies operate to organize services around the needs of citizens and businesses, with Virtual one-stop-shop for Government Services and by using the Government Intranet.
 - 5) **Online Democracy Phase.** This is the phase in which citizens are encouraged to participate actively in State decision-making and the construction of public policies involving the use of information and communication technologies.
 - 6) **Transverse Elements.** Agencies should institutionalize the Government Online Strategy as part of the organizational culture and in support of their mission activities.

For each phase, the respective activities and criteria to be considered for the measurement of each of the phases are proposed (Table I). It should be mentioned that the Transversal Elements Component is additionally presented in all phases of online government which takes into account the development of activities that are not associated with a single component, as it involves considerations or analysis that impact on different areas in the entity, however, this study was based on the user's approach, that is, what a citizen can perceive and evidence of the provision of online procedures and services since these are the ones that determine the quality of the information and services that the State provides and enables. Taking this into consideration, this evaluation does not consider the Transverse Elements Component.

B. Shahkooh's 5-phase Maturity Model for e-Government

The phases defined in the Colombian e-Government Strategy are similar to the phases of the e-government maturity model proposed by Shahkooh. The author identifies the main stages defined in nine e-government maturity models [4] and, based on the review, comparison and synthesis of

these, establishes a five-stage model which is introduced below.

- 1) **Online Presence.** At this stage, the government begins to move towards e-government and publishes useful information online.
- 2) **Interaction.** The government goes further, and citizens can interact with it through downloads of forms and mailings to public servants.
- 3) **Transaction.** At this stage, typical services such as tax returns, payments and renewal of driver's licenses are available.
- 4) **Fully integrated and transformed E-government.** At this stage, the provision of government services is redefined by providing a point of contact with citizens.
- 5) **Digital Democracy.** Some services such as online voting, online public forums and online opinion polls are available.

Reference [4] also discusses which technologies are useful at each stage:

- 1) **Online Presence.** Basic web technologies, bulletin boards.
- 2) **Interaction.** Electronic data exchange, search engine, email, forms download.
- 3) **Transaction.** Electronic data exchange, Electronic filing systems, interoperable technology, Security (public key infrastructure, digital signature), access to information, 24/7 infrastructure, secure communication network.
- 4) **Fully integrated and transformed E-government.** New application, new data structure, new standards, new interface.
- 5) **Digital Democracy.** Public key infrastructure, more sophisticated interface and interoperable technologies, chat rooms.

It can be observed that the definition of the Colombia e-Government Strategy and Shahkooh's Maturity Model for e-Government can show a great similarity. Hence, it is assumed that it is pertinent to make the evaluation considering the Shahkooh model on the basis of its similarity with the phases defined for the e-Government Strategy.

TABLE I
COMPONENTS AND ACTIVITIES DEFINED IN THE E-GOVERNANCE STRATEGY MANUAL

	Components				
	Online Information	Online Interaction	Online Transaction	Online Transformation	Online Democracy
Activities	Information publishing.	Enable electronic spaces to interpose petitions.	Forms for download and / or online filling.	Activities to use electronic means in internal processes and procedures	To define participation strategy
	Open data publishing	Enable interaction spaces.	Online issuance of certificates and records. Automation of procedures and services. Virtual one-stop-shop for Government Services Online payments Use of electronic and digital signatures.	Activities to exchange information between agencies	A participative formulation of policies and strategic planning To open spaces for social control To open spaces for open innovation

III. ASSESSMENT METHOD

In order to evaluate the maturity level of the Virtual Conciliation, framed in the online government, a list of the CCs registered in the *SICAAC - Conciliation, Arbitration and Friendly Composition Information System* was extracted. This is the information system operated by the Ministry of Justice and Law in which all ADR practitioners record their actions. As a result, a total of 388 CCs was obtained as of January 31st, 2018, of which 8 were excluded because they were revoked or suspended, for which reason the revision was made to the technological platforms of 380 CCs.

The website of each of the CCs was reviewed to identify the activities that these entities have implemented as part of the e-government strategy to contribute to the Virtual Conciliation in Colombia. To evaluate each stage of the Shahkoo model, the activities defined with their analogous phase in the manual for the implementation of the Online Government Strategy in the national entities of the Republic of Colombia 2012-2015 (and territorial 2012-2017) were considered. In addition, the open data information was obtained from the Colombian government's open data system.

TABLE II
STAGE 1: ONLINE PRESENCE (PERCENTAGE: 100%)

Activities	Information publishing. (Percentage: 57%)			Is the information up to date? (YES/NO)	Open data publishing [7] (Percentage: 43%)	
Criteria	*Editorial Policy: 8%	Information publishing: 40%	Multi-channel access: 9%		Information Inventory: 12%)	Data opening: 31%
Description		Publishing basic information (Max 27%). Information on Audio and Video (Max 2%). Main information in another language (4%). Additional information in another language (3%). *Improvement (4%).	Mobile access (8%). Access via digital television (1%).		*Elaboration of the Inventory (7,2%). Publication of the information inventory (4,8%).	*Prioritization and data opening plan (3%). *Documentation of the data (5%). Data Structuring (5%). Publication of data sets (15%). * Improvement (3%).

*Criteria excluded from the evaluation

TABLE III
STAGE 2: INTERACTION (PERCENTAGE: 100%)

Activities	Enable electronic spaces to interpose petitions. (Percentage: 50%)			Enable interaction spaces. (Percentage: 50%)	
Criteria	PQRD (claims and complaints) and contact system: 28%	Mobile contact system and PQRD (claims and complaints): 11%	Integrated PQRD (claims and complaints) system: 11%	Interactive consulting of information: 20%	Interaction Services: 30%
Description	Space for contact, claims and complaints. (26%). *Improvement (2%).		Integration of communication channels (6%). Integration with control bodies and superintendencies. (5%).	Query to databases (13%). Interactive information (7%).	Online Support (6%). Subscription to email or RSS information services (4%). Database of authorized e-mails for communications and notifications (3%). Subscription to mobile information services (5%). Opinion polls (3%). Confirmation notifications (6%). *Improvement (3%).

*Criteria excluded from the evaluation

TABLE IV
STAGE 3: TRANSACTION (PERCENTAGE: 100%)

Activities	Forms for download and / or online filling. (Percentage: 5%)	Online issuance of certificates and records. (Percentage: 15%)	Automation of procedures and services. (Percentage: 65%)	Virtual one-stop-shop for Government Services. (Percentage: 15%)
Criteria	Downloadable forms: 5%	Online certificates and records: 15%	Online procedures and services: 65%	One-stop-shop for Government Services: 15%
Description			*Characterization, analysis and prioritization of the procedures and services of the entity (7,5%). Automatization (35%). *Defining the multi-channel assistance scheme (4%). *Implementation of alternative channels for the provision of procedures and services (13,5%). *Improvement (5%).	Prioritization and planning (5%). Implementation (10%).

*Criteria excluded from the evaluation

TABLE V
STAGE 4: FULLY INTEGRATED AND TRANSFORMED E-GOVERNMENT (PERCENTAGE: 100%)

Activities	Activities to use electronic means in internal processes and procedures (Percentage: 45%)			Activities to exchange information between agencies (Percentage: 55%)	
Criteria	*Good practices: 9%	Document Management System: 13%	Process automatization: 23%	Chain of procedures: 27,5%	Information exchange services: 27,5%
Description			Characterization of processes and procedures (4%).	Common language of exchange (5%).	Identification (3%).
			*Process analysis, prioritization and rationalization (4%).	Identification, analysis, prioritization and optimization of procedure chains (5%).	Conceptualize data elements (4%).
			Automatization (12%).	Automatization (12,5%).	Automating services (12%).
			* Improvement (3%).	Publication of services in the catalogue (5%).	Publish the services in the catalogue (4%).
					*RAVEC (High Speed Network of the Colombian Government) (2%).
					* Improvement (2,5%).

*Criteria excluded from the evaluation

TABLE VI
STAGE 5: DIGITAL DEMOCRACY (PERCENTAGE: 100%)

Activities	To define participation strategy. (Percentage: 15%)	A participative formulation of policies and strategic planning (Percentage: 40%)		To open spaces for social control (Percentage: 20%)	To open spaces for open innovation (Percentage: 25%)	
Criteria	Participation strategy by electronic means: 15%	Regulations: 20%	Strategic Planning: 20%	Accountability: 20%	Promotion of Open Data: 8%	Problem solving: 17%
Description	*Planning (2%).					
	*Contact details for participation (1%).	Call for proposals (5%).	Call for proposals (5%).	Call for proposals (4%).		Call for proposals (5%).
	Call for proposals (2%).	Query (5%).	Query (5%).	Query (4%).		Spaces to propose solutions (6%).
	Discussion (3%).	Feedback (5%).	Feedback (5%).	Feedback (4%).		Results (6%).
	Feedback and results (2%).	Results (5%).	Results (5%).	Discussion (4%).		
	* Improvement (5%).			Results (4%).		

*Criteria excluded from the evaluation

The following is a list of activities defined for each stage of the e-government maturity model with their respective evaluation weight (percentage), the criteria considered for the evaluation and a description of each activity (Tables II-VI). It should be clarified that activities that are performed in other areas of the entity and that may not be perceived by the user when it accesses the entity's website were excluded; these are recognized by the asterisk in front of them. Likewise, it should be mentioned that the use of the words phase and stage becomes indistinct from this moment on.

IV. RESULTS

The review of each CC, under the criteria, set out above and towards providing the Virtual Conciliation service, produced the following results. Only 273 out of 380 CCs have a functional web page on which they provide basic information about their services and the procedures that their entity can do. Only 2 of websites have informed about the Virtual Conciliation services on its technological platform. Below are the results obtained in the evaluation of the 273 web pages that were assessed. The convention for Tables VII-XI is:

- **No. CC:** Number of web pages, and therefore Conciliation Centers, that fully meet the description in relation to E-Height. [No. of conciliation centers].

- **No. CC2:** Number of web pages, and therefore Conciliation Centers, that meet at least half of the description in relation to E-Height. [No. of conciliation centers].
- **No. CC3:** Number of web pages, and therefore Conciliation Centers, that fully meet the criteria or activity in relation to R-Height. [No. of conciliation centers].
- **No. CC4:** Number of web pages, and therefore Conciliation Centers, that meet at least half of the criteria or activity in relation to R-Height. [No. of conciliation centers].
- **R-Height:** Relative weight that omits the weight of the excluded criteria. [%].
- **Avg:** Average fulfilled by the Conciliation Centers evaluated. [%].
- **Min:** Minimum value of the sample. [%].
- **Max:** Maximum value of the sample. [%].
- **E-gov Height:** Evaluation weight in accordance with e-government manual. [%].

TABLE VII
PHASE 1 RESULTS: ONLINE PRESENCE

Descriptions	No. CC	No. CC2	R-Height [%]	Avg [%]	Min [%]	Max [%]	E-gov Height [%]
Publishing basic information	34	99	-	12,16	0,00	27,00	27,00
Information on Audio and Video	28	28	-	0,21	0,00	2,00	2,00
Main information in another language	36	36	-	0,53	0,00	4,00	4,00
Additional information in another language	26	26	-	0,29	0,00	3,00	3,00
Mobile access	267	267	-	7,82	0,00	8,00	8,00
Access via digital television	0	0	-	0,00	0,00	0,00	1,00
Publication of the information inventory	7	7	-	0,12	0,00	5,00	4,80
Data Structuring	0	1	-	0,01	0,00	3,00	5,00
Publication of data sets	3	3	-	0,16	0,00	15,00	15,00
Criteria	No. CC3	No. CC4					
Information publishing	1	40	36,00	13,18	0,00	36,00	40,00
Multi-channel access	0	198	9,00	7,82	0,00	8,00	9,00
Information Inventory	4	4	4,80	0,12	0,00	4,80	12,00
Data opening	0	1	20,00	0,18	0,00	15,00	31,00
Activities	No. CC3	No. CC4					
Information publishing	75	190	45,00	21,00	0,00	44,00	57,00
Is the information up to date?	YES: 208	-	-	-	-	-	-
Open data publishing	1	1	24,80	0,30	0,00	20,00	43,00
Result	No. CC3	No. CC4					
Phase 1: Online Presence	0	36	69,80	21,30	0,00	61,00	100,00

TABLE VIII
PHASE 2 RESULTS: INTERACTION

Descriptions	No. CC	No. CC2	R-Height [%]	Avg [%]	Min [%]	Max [%]	E-gov Height [%]
Space for contact, claims and complaints	188	188	-	17,91	0,00	26,00	26,00
Integration of communication channels	1	1	-	0,02	0,00	6,00	6,00
Integration with control bodies and super intendencies	2	2	-	0,04	0,00	5,00	5,00
Query to databases	10	10	-	0,48	0,00	13,00	13,00
Interactive information	7	7	-	0,18	0,00	7,00	7,00
Online Support	35	35	-	0,77	0,00	6,00	6,00
Subscription to email or RSS information services	9	9	-	0,13	0,00	4,00	4,00
Database of authorized e-mails for communications and notifications	4	4	-	0,04	0,00	3,00	3,00
Subscription to mobile information services	0	0	-	0,00	0,00	0,00	5,00
Opinion polls	2	2	-	0,02	0,00	3,00	3,00
Confirmation notifications	14	14	-	0,31	0,00	6,00	6,00
Criteria	No. CC3	No. CC4					
PQRD (claims and complaints) and contact system	138	138	26,00	17,91	0,00	26,00	28,00
Mobile contact system and PQRD (claims and complaints)	131	131	11,00	7,37	0,00	11,00	11,00
Integrated PQRD (claims and complaints)	0	1	11,00	0,06	0,00	6,00	11,00
Interactive consulting of information	1	8	20,00	0,66	0,00	20,00	20,00
Interaction Services	0	3	27,00	1,27	0,00	16,00	30,00
Activities	No. CC3	No. CC4					
Enable electronic spaces to interpose petitions	0	138	48,00	25,34	0,00	43,00	50,00
Enable interaction spaces	0	2	47,00	1,93	0,00	36,00	50,00
Result	No. CC3	No. CC4					
Phase 2: Interaction	0	18	95,00	27,27	0,00	73,00	100,00

TABLE IX
PHASE 3 RESULTS: TRANSACTION

Descriptions	No. CC	No. CC2	R-Height [%]	Avg [%]	Min [%]	Max [%]	E-gov Height [%]
Automatization	2	11	-	1,49	0,00	35,00	35,00
Prioritization and planning	1	1	-	0,02	0,00	5,00	5,00
Implementation	1	7	-	0,15	0,00	10,00	10,00
Criteria	No. CC3	No. CC4					
Downloadable form	55	55	5,00	1,43	0,00	5,00	5,00
Online certificates and records	5	5	15,00	0,27	0,00	15,00	15,00
Online procedures and services	2	10	35,00	1,49	0,00	35,00	65,00
One-stop-shop for Government Services	0	1	15,00	0,16	0,00	10,00	15,00
Activities	No. CC3	No. CC4					
Forms for download and / or online filling	55	55	5,00	1,43	0,00	5,00	5,00
Online issuance of certificates and records	5	5	15,00	0,27	0,00	15,00	15,00
Automation of procedures and services	2	10	35,00	1,49	0,00	35,00	65,00
Virtual one-stop-shop for Government Services	0	0	30,00	0,16	0,00	10,00	30,00
Result	No. CC3	No. CC4					
Phase 3: Transaction	0	4	65,00	3,22	0,00	44,00	100,00

TABLE X
PHASE 4 RESULTS: FULLY INTEGRATED AND TRANSFORMED E-GOVERNMENT

Descriptions	No. CC	No. CC2	R-Height [%]	Avg [%]	Min [%]	Max [%]	E-gov Height [%]
Characterization of processes and procedures	60	60	-	0,88	0,00	4,00	4,00
Automatization	9	10	-	0,44	0,00	12,00	12,00
Common language of exchange	0	0	-	0,00	0,00	0,00	5,00
Identification, analysis, prioritization and optimization of procedure chains	0	0	-	0,00	0,00	0,00	5,00
Automatization	0	0	-	0,00	0,00	0,00	12,50
Publication of services in the catalogue	0	0	-	0,00	0,00	0,00	5,00
Identification	0	0	-	0,00	0,00	0,00	3,00
Conceptualize data elements	0	0	-	0,00	0,00	0,00	4,00
Automating services	0	0	-	0,00	0,00	0,00	12,00
Publish the services in the catalogue	0	0	-	0,00	0,00	0,00	4,00
Criteria	No. CC3	No. CC4					
Document Management System	43	43	13,00	3,00	0,00	13,00	13,00
Process automatization	0	5	16,00	1,32	0,00	16,00	23,00
Chain of procedures	0	0	27,50	0,00	0,00	0,00	27,50
Information exchange services	0	0	23,00	0,00	0,00	0,00	27,50
Activities	No. CC3	No. CC4					
Activities to use electronic means in internal processes and procedures	0	0	38,00	4,32	0,00	29,00	45,00
Activities to exchange information between agencies	0	0	51,50	0,00	0,00	0,00	55,00
Result	No. CC3	No. CC4					
Phase 4: Fully integrated and transformed E-government.	0	0	80,50	0,44	0,00	12,00	100,00

V. DISCUSSION

Virtual Conciliation is defined by the Ministry of Justice and Law of Colombia as the conciliation supported by information systems, applications or platforms and communications are provided through it. This notion implies that the agencies that provide this service need a minimum of technological capacity that allows them to develop this mechanism effectively. Analysing Shahkooh's maturity level stages, it becomes evident that in order to have the capacity to provide a virtual conciliation service, the agency should have a maturity level of 4 or higher, since it is at this point that the processes and services in the agency are automated. During the review it became evident that two CCs offered the Virtual Conciliation service on their web platform, however, by further investigating, it can be seen that the link to request a

Virtual Conciliation from one of the agencies does not work, and in the other case, the agency allows the parties to connect via Skype to conduct the audience, but must necessarily have an attorney in fact in the audience room, which indicates that the benefits of the technologies are not fully exploited and that the conciliation process is not conducted entirely through electronic channels. The following is an analysis of each phase of the maturity model in order to recognize the characteristics of the CCs that allow a virtual conciliation service to be provided in Colombia, based on the implementation of the e-government strategy promoted by the Colombian State, which is equivalent to the 5-phase maturity model of Shahkooh for e-government.

TABLE XI
PHASE 5 RESULTS: DIGITAL DEMOCRACY

Descriptions	No. CC	No. CC2	R-Height [%]	Avg [%]	Min [%]	Max [%]	E-gov Height [%]
Call for proposals	4	4	-	0,03	0,00	2,00	2,00
Discussion	2	2	-	0,02	0,00	3,00	3,00
Feedback and results	2	2	-	0,01	0,00	2,00	2,00
Call for proposals	4	4	-	0,07	0,00	5,00	5,00
Query	3	3	-	0,05	0,00	5,00	5,00
Feedback	2	2	-	0,04	0,00	5,00	5,00
Results	3	3	-	0,05	0,00	5,00	5,00
Call for proposals	3	3	-	0,05	0,00	5,00	5,00
Query	2	2	-	0,04	0,00	5,00	5,00
Feedback	2	2	-	0,04	0,00	5,00	5,00
Results	2	2	-	0,04	0,00	5,00	5,00
Call for proposals	2	2	-	0,03	0,00	4,00	4,00
Query	3	3	-	0,04	0,00	4,00	4,00
Feedback	2	2	-	0,03	0,00	4,00	4,00
Discussion	2	2	-	0,03	0,00	4,00	4,00
Results	3	3	-	0,04	0,00	4,00	4,00
Call for proposals	2	2	-	0,04	0,00	5,00	5,00
Spaces to propose solutions	2	2	-	0,04	0,00	6,00	6,00
Results	2	2	-	0,04	0,00	6,00	6,00
Criteria	No. CC3	No. CC4					
Participation strategy by electronic means	1	1	7,00	0,07	0,00	7,00	15,00
Regulations	1	1	20,00	0,22	0,00	20,00	20,00
Strategic Planning	1	1	20,00	0,16	0,00	20,00	20,00
Accountability	1	1	20,00	0,18	0,00	20,00	20,00
Promotion of Open Data	2	2	8,00	0,09	0,00	8,00	8,00
Problem solving	1	1	17,00	0,12	0,00	17,00	17,00
Activities	No. CC3	No. CC4					
To define participation strategy	1	1	7,00	0,07	0,00	7,00	15,00
A participative formulation of policies and strategic planning	1	1	40,00	0,38	0,00	40,00	40,00
To open spaces for social control	1	1	20,00	0,18	0,00	20,00	20,00
To open spaces for open innovation	1	1	25,00	0,21	0,00	25,00	25,00
Result	No. CC3	No. CC4					
Phase 5: Digital Democracy	2	2	92,00	0,84	0,00	92,00	100,00

In Stage 1, referring to the presence of the entity on the Internet, it is the level of maturity in which the most CCs are, however, not with high levels of compliance. On the other hand, it should be pointed out that 72% of the CCs registered in SICAAC have a web page and 76% of them keep the information updated. 98% of the web pages are optimized to be consulted by mobile devices. This is positive bearing in mind that in order to do virtual conciliation it is recommendable for the agency to have a web platform. One of the weak points identified at this stage is that the CCs still do not put into practice the philosophy of open data, which means that certain types of data that may be of interest to citizens are not available. The evaluation in Stage 2 of the model demonstrates the importance of contact systems and PQRS for the CCs, 50% have some mechanism that allows users to contact the entity through its web platform. However, it can be observed that there are very few spaces for interaction in which the user can subscribe to information services or request online support. In order to put Virtual Conciliation into practice, this is an issue that must be improved.

Regarding the evaluation of Stage 3 of the model, it should be noted that 20% of the CCs have document formats

available for downloading, as well as online forms for requesting the conciliation service or conducting some type of procedure. However, very few CCs have automated this service or procedures. Usually, the formats or online forms available are for initiating the conciliation process, but not for developing or completing it.

The evaluation in Stage 4 of the model has the lowest number of CCs of all 5 stages. According to the evaluation, there is no entity that reaches half the weight needed to reach this level of maturity. To highlight, 15% of the entities have a Document Management System, something that would be a benefit when implementing virtual conciliation. Finally, the evaluation in Stage 5 of the model shows that there are CCs with the capabilities and qualities to do Virtual Conciliation, even though they do not yet offer it. These entities have a technological platform that has automated certain services and procedures whose operation is superior to that of other entities.

VI. CONCLUSION

It is evident that in the context of conciliation, maturity of the CC does not reach the necessary level in the model so that

it can be considered as virtual conciliation. This situation shows the great gap that these entities have when it comes to implementing IT in their procedures and services. In spite of the great effort that the country is making to promote technologies in the different sectors of the country, the justice sector must focus its efforts on promoting IT in its processes.

New strategies must be considered to promote IT on justice sector. There is a great potential to enhance government procedures and services. Establish a strategy to promote Virtual Conciliation may lead to improving IT capabilities on Conciliation Centers. It should be noted that these agencies have taken several actions to improve their status in the provision of services through IT. Their participation in e-government can be seen in the results. This represents an opportunity for them to develop a better level of maturity along with the growth of Virtual Conciliation in Colombian State.

REFERENCES

- [1] Ministerio de tecnología de la Información y las comunicaciones. (2015). Estrategia De Gobierno En Línea 2012 – 2015.
- [2] Documento Técnico sobre los Métodos de Resolución de Conflictos para el Plan Decenal del Sistema de Justicia (2018). Retrieved from https://www.minjusticia.gov.co/Portals/0/PLAN_DECENAL_IMAGES/DocPropuestas/DoctecMRCPDSJ.pdf
- [3] Ministerio de Justicia y del Derecho. Programa Nacional de Conciliación. Conciliación Virtual. Bogotá D.C. [Online] Available at: <http://conciliacion.gov.co/portal/-Conciliaci%C3%B3n/Conciliaci%C3%B3n-Virtual/Definici%C3%B3n>
- [4] Shahkooh, K., Saghaf, F., & Abdollahi, A. (2018). A Proposed Model for E-government Maturity - IEEE Conference Publication. Retrieved from <http://ieeexplore.ieee.org/document/4529948/>
- [5] Funcionpublica.gov.co. (2018). Función Pública. [Online] Available at: http://www.funcionpublica.gov.co/web/mipg/documentos/-/document_library/tfVWGgioFma4/view_file/28588226?_com_liferay_document_library_web_portlet_DLPortlet_INSTANCE_tfVWGgioFma4_version=1.0 [Accessed 5 Apr. 2018].
- [6] Decreto No 1151 de 2008. Lineamientos Generales de la Estrategia de Gobierno en Línea de la República de Colombia. Ministerio de Comunicaciones., Bogotá D.C., Colombia, 14th April 2008.
- [7] Datos Abiertos Gobierno Digital Colombia. (2018) [Online] Available at <https://www.datos.gov.co/>