

This is the peer reviewed version of the following article: <PADOVANI, C. and PAVAN, E. (2016), *Global governance and ICTs: exploring online governance networks around gender and media*, Global Networks, 16: 350-371>, which has been published in final form at <https://doi.org/10.1111/glob.12119>. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Use of Self-Archived Versions.

Global Governance and ICTs:

Exploring online governance networks around Gender and Media

Claudia Padovani, University of Padova

Elena Pavan, University of Trento

Abstract

In this article, we address transformations in global governance brought about by information and communication technologies (ICTs). Focusing on the specific domain of “gender-oriented communication governance” we investigate online interactions amongst different kinds of actors active in promoting gender equity in and through the media. By tracing and analyzing online issue networks, we investigate which actors are capable of influencing the framing of issues and of structuring discursive practices. From the analysis, different forms of power emerge, reflecting diverse modes of engaging in online interactions, where actors can operate as network ‘programmers’, ‘mobilizers’, or ‘switchers’. Our case study suggests that, often, *old* ways of conceiving actors’ interactions accompany the implementation of *new* communication tools; while the availability of a pervasive networked infrastructure does not automatically translate into meaningful interactions amongst all relevant actors in a specific domain.

Keywords: Global governance; issue networks; ICTs; gender; media; power

1. Introduction

Globalization dynamics have solicited reconsideration of governing arrangements, stressing the role of the different actors involved and the implications of actors’ diversity for decision-making. In this context, increasing attention has been paid to socio-political transformations brought by information and communication technologies (ICTs), with a particular emphasis on civic participation and collective action dynamics (for a review, see Pavan 2014). Conversely, less attention has been paid

to how ICTs' participatory potential may affect multi-actor governing arrangements by impacting on political discourses and frames and, as a consequence, on actors' negotiating capacity.

It is widely recognized that governance processes, which used to be structured around inter-state relations, have increasingly become sites of engagement for different "stakeholders": private and commercial entities, non-governmental organizations, as well as formal and informal networks including diverse actors, such as municipalities, think tanks, academics, and grassroots groups (Kooiman 2003; Arts and Jervis 2009). ICTs' capillary penetration into our daily lives further challenges traditional political processes by enhancing the participation of non-conventional and non-governmental actors. Not only do networked digital technologies support actors in their organizational activities, but they also contribute to the opening up of *new spaces for interaction*. In this sense, beside official institutional venues such as high level summits and consultations, relations between governmental and non-governmental actors can be established online with a view to achieve common goals and policies but also to promote alternative, and sometimes conflicting, frames.

The invisibility of online spaces does not diminish their relevance in structuring the ideational components of governance processes, such as principles, ideas, frames and norms. Quite the opposite: ICTs impact the substance of governance processes by giving *new prominence to the communicative dimension of governance*. Indeed, in the digital space, relations are made first and foremost through the establishment of communicative interactions. This situation invites more systematic explorations of discursive exchanges as well as of the ways in which power relations are played out by actors who can contribute in different ways to the definition of meanings, priorities and, eventually, courses of action.

In this article we aim to enhance our understanding of the nexus between ICTs and the transformation of governance processes, and we do this by analyzing online interactions amongst different kind of actors, who operate in the specific domain of "gender-oriented communication governance" (GoC_Gov). The focus is set on organizational actors, emerged after the Beijing 1995 World Conference on Women, that engage transnationally in defining and fostering principles and practices to promote gender equity in and through the media. By tracing and analyzing the network of hyperlinks established amongst a set of governmental and non-governmental actors in the GoC_Gov domain, we aim to achieve three different but interrelated goals. First, we want to bring to the surface the virtual component of contemporary governance processes. Second, we will investigate the patterns of online interactions amongst different stakeholders groups, to gain a more articulated understanding of multi-actor governance. Finally, we expect to identify who is better

positioned to influence the framing of issues, and the diffusion of principles and standards of behavior in this specific domain.

In so doing, the article addresses the communicative dimension of governance processes in relation to a specific area within the broader governance of global communications. Our approach reflects a conceptualization of governance that acknowledges ideational as well as regulatory aspects, alongside the complexities of increasingly mediated supra-national multi-stakeholder dynamics. Thus, we do not perform a traditional hypothesis-testing analysis nor do we aim at generalizing results obtained from this specific study to world politics in general. Rather, we elaborate and apply a research framework centered on networks as both metaphors and empirical tools for research. We use this as a test-bed to explore how power relations are played out in global governance, in a context deeply permeated by digital networking technologies.

The article is organized as follows. First, we highlight the relevance of discursive practices, ideational elements and ICTs to global governance and we link this to the possibility of a multi-dimensional understanding of power dynamics in online communication networks (Section 2). We then briefly introduce our case study and explore the online patterns of interactions amongst different actors involved in the gender and media domain through a network approach applied to online issue networks. Furthermore, we explore the different forms of power that these actors exert in shaping the online conversation about Goc_Gov (Section 3). In the concluding remarks, we highlight the main findings and their implications, and we identify some open issues for further explorations of global governance through a network reading of power dynamics in complex, socio-technical (offline-online) environments (Section 4).

2. Multi-actor networked governance, ICTs and power

Global governance is not the preserve of nation-states and state diplomacy. Several authors have indicated the growing number of international inter-governmental and non-governmental organizations (IGOs and INGOs) that characterized the second half of the twentieth century, as a sign of transformation in world politics. Some have stressed the growing relevance of private actors in the global context as both a challenge and an opportunity for more transparent and legitimate governance settings (Arts and Jervis 2009; Baylis and Smith 1997; Held and McGrew 2003; Held et al. 1999; Hewson and Sinclair 1999). Others have focused specifically on the democratizing potential deriving from the participation of civic organizations (Art 2003; Dodds 2002; Dryzek 2005; Kaldor 2003; Keane 2003; Keck and Sikkink 1998; Smith et al. 1997).

In our previous work, we argued that a network approach to governance meets the challenges posed by the diversity of actors, the dynamics across sectors and the deriving complexity in governing arrangements (Kooiman 2003) while avoiding the shortcomings that accompany the much used, yet under-theorized and contested concept of “multi-stakeholderism” (Padovani and Pavan 2011). Indeed networks are powerful conceptual and analytical tools for portraying the growing complexity of contemporary societies where policy outcomes can be “generated within multiple-actor-sets in which individual actors are interrelated in a more or less systematic way” (Kenis and Schneider 1991: 32).

Here we suggest that networks can also be employed to account for the different interests brought into governing processes (Hemmati 2002) through the establishment of communicative interactions (Dryzek 2005 and 2006; Haas 1992; Risse 2000; Wiener 2008). According to this strand of reflections, actors participating in the definition of governing arrangements engage in cooperative or conflictual relations depending on their ideas, beliefs and preferences. Such symbolic exchanges are relevant to governance processes as, under specific circumstances, principles and ideas can translate into shared frames (Benford and Snow 2000), policy-oriented discourses (Aptorp and Gasper 1996; Howarth and Torfing 2005; Atkinson et al. 2011) and agreed upon norms (Finnemore and Sikkink 1998) that orient policy-finding and policy-making processes.

In a context of ubiquitous networking technologies, ICTs constitute mediating infrastructures that expand the space and scope of actors’ principled interactions, thus facilitating the emergence of multi-actor discursive practices. By enabling the participation of non-conventional and non-governmental actors, ICTs foster the diversification of perspectives that underpin the definition of collective frames, which, in turn, guide the governance of any specific domain. In this sense, communication technologies enhance the possibility for individuals, groups and communities to challenge the traditional conduct of political processes and to take part in the articulation of alternative and competing discourses and frames. Hence it becomes important to gain a better understanding of how actors of different nature engage in online interactions and how, in doing so, they harness the potential of ICTs to promote their interests and preferred frames.

It also becomes important to explore to what extent ICT-enabled discursive practices can be read in terms of actors’ capacity to influence courses of action, and thus exert some form of power. Indeed, several attempts have been made recently to re-conceptualize power in world politics in light of the heterogeneity of the actors involved. Some authors have stressed the performative nature of power whereby “the very definition of power is a political intervention” (Guzzini, 2007: 35) and its multidimensional character (Berenskoetter and Willams 2007; Haugaard and Ryan 2012;

Nye 2010; Lukes 2005[1974]). Others have looked at the power of ideational elements in politics, particularly of knowledge (Haas 1992) and words (Epstein 2008; Wiener 2008).

Some authors have also stressed the need to rethink power in the context of technology diffusion, since “the exercise of power relationships is decisively transformed in the new organizational and technological context derived from the rise of global digital networks of communication” (Castells 2009: 4). Power within digital networks is often associated with actors’ capacity to direct and control the construction of meanings (Padovani and Pavan forthcoming; Benkler 2011; Castells 2011; Pavan 2012). Actors’ positions within online networks facilitate (or prevent) their gatekeeping function in controlling flows of information and ideas. These, in turn, may affect their capacity to connect different networks, and to structure policy-relevant discursive spaces.

A focus on online networks linking actors’ websites offers a useful entry point to analyze both patterns of Web-based interaction amongst different actors and the associated power dynamics.

3. Exploring multi-actor interactions and power in online governance networks

3.1 The case study: “gender-oriented communication governance”

Our empirical investigation focuses on a specific domain we refer to as “gender-oriented communication governance” (GoC_Gov) whereby normative frameworks and policy responses are negotiated with a twofold aim: on the one hand, to address the shortcomings and imbalances characterizing the nexus between women, men, communication and mediating technologies; on the other, to promote gender equity and women’s empowerment in and through the media.

The relevance of gender differences to the structuring of social inequalities and power relations is widely acknowledged and the international community has long recognized the nexus between women and media as one of the major challenges in fostering equal opportunities in contemporary societies. During the United Nations Fourth World Conference on Women (Beijing 1995), this recognition produced the basis of an overall normative framework for this area synthesized in what is known as “Section J” of the Beijing Platform for Action (PfA) and revolving around two main principles: i) the increased participation and access of women to expression and decision-making in and through the media and new technologies of communication; and ii) the promotion of a balanced and non-stereotyped portrayal of women in the media”. Thus, Section J of the Beijing PfA includes a set of Recommendations to governments, IGOs, INGOs, media organizations and professionals to guide their actions in implementing the vision of the Conference. Such widely recognized provision has become the reference point for subsequent policy interventions and media operations, as well as for assessment practices.

The progressive deployment of a supra-national discourse in this area has also legitimated and (re)activated a plurality of actors – including governmental and intergovernmental agencies, epistemic communities, professional and advocacy networks – which over the years have contributed to framing controversial issues concerning gender misrepresentation as well as women’s marginalization and discrimination, also in media systems’ operations and in their governance. More recently, with the explosion of information technologies, newer issues have emerged related to unequal access to and control of technologies, privacy and violence, pornography on the Internet, which imbue transnational debates and invite an integration of the normative foundations agreed upon in Beijing.

We argue that Goc_Gov offers a meaningful case study to investigate the nexus between governance networks, their online discursive practices and power for a number of reasons. First, it has become a highly internationalized policy domain, yet not sufficiently investigated (Byerly 2012, Byerly and Ross 2006; Gallagher 2011; Jensen 2005, Sarikakis and Shade 2008). Second, it is inhabited by a plurality of interacting actors who contribute their visions and knowledges towards orientating norms and policies, while connecting global and local spaces of discourse and intervention. Third, such connections are established both offline, through physical participation in events and consultations, and online, thanks to the activation of Web-based resources, spaces for information sharing and communication exchange. Moreover, Goc_Gov lies at the intersection of two strategic policy sectors, those of global communications regulations and of gender equality interventions, which invites recognition of inter-sectorial complexities. In this sense, GoC_Gov offers the opportunity to empirically operationalize the relevance of networked multi-actor interactions, as well as the role played by digital technologies in transforming global governance processes.

3.2 Methods: mapping the online issue network

In order to trace the Goc_Gov online issue network, we started from a list of forty-one URLs representing meaningful actors that operate to promote gender equality in and through the media and that have been active and widely recognized transnationally for some decades (see table 6 in the Appendix). These “starting points” were identified through a systematic mapping activity realized by combining different techniques (interviews with experts, Web-search, and information retrieval from literature) and aimed at identifying actors (individual and organizational), policy documents and resources (archives, publications, toolkits etc.) that are relevant to the GoC_Gov domain.¹

The initial set of URLs was processed through a tool called Issue Crawler (IC),² one of the first software designed to systematically crawl the Web and trace “issue networks”, i.e., a set of

Web resources and websites that share a thematic focus on a specific issue and are connected amongst themselves via hyperlinks (Rogers 2004). In order to trace online issue networks, IC performs a process called *co-link analysis*. The software starts from a given set of “starting points”, i.e., URLs associated with organizations websites or Web resources that are pertinent to an issue. For each starting point in the initial set, IC fetches all outgoing links. Whenever at least two starting points share outgoing links to a website or a Web resource that is not in the initial list, the software adds a new node to the network. At the end of this process, the software traces hyperlink patterns amongst all nodes in the final list and returns a map of the online issue network.

Interestingly, the actors and resources that are eventually included in the issue network do not necessarily share the same opinion or perspective on the issue at stake. Indeed, actors’ websites and digital resources can link to each other because they belong to a coalition of the like-minded, but also because they are adversaries and want to expose or denounce opposite visions. Nevertheless, nodes within the traced issue network do share the same thematic focus and can therefore be reasonably considered as active contributors to a (more or less controversial) conversation on a specific topic (Rogers 2004 and 2010).

The Goc_Gov issue network resulting from the automated crawling activity is illustrated in figure 1. Organizations’ websites and online resources are represented as disks and are clustered according to their Top Level Domain (TLD). In general, TLDs reflect different “types” of websites and, therefore, of different actors that are present in the online space. They can thus be considered as proxies for different interests and preferences conveyed in the online conversation and used to identify different actors’ groups.³

As table 1 shows, the conversational dynamic under examination is carried on by a majority of civil society organizations and Web resources, which form quite a heterogeneous group ranging from human rights professionals (e.g., amnesty.org), to gender and media organizations (e.g., Women Institute for Freedom of the Press, WIFP), to radical information and communication activism (e.g., indymedia.org). The second group in terms of size is that of United Nations institutions and agencies (UN_org, sixteen nodes), followed by .com (twelve nodes), gathering mostly news and newspapers’ websites, and then by .org_local (ten nodes), which includes national entities or national chapters of transnational civic organizations.

insert figure 1 about here

insert table 1 about here

3.3 Network interactions and linking behaviour

Relational dynamics underpinning online multi-actor discursive interactions in the Goc_Gov domain can be investigated first of all at the level of the overall network defined by hyperlink patterns established by the actors concerned. As table 2 illustrates, such patterns underpin an online conversation that unfolds within a network consisting of 81 nodes connected by 441 edges. Although there are no isolates, i.e., nodes without any links to the rest of the network, the overall network features suggest that the conversation is rather fragmented. Indeed, the density value, which indicates the proportion of existing ties in comparison to the total number of possible ties in a network, shows that less than ten per cent of possible ties are activated. Hence, in spite of the common thematic focus, Goc_Gov online interactions tend to be carried on in a selective way. Moreover, even when connections are established, they tend to be asymmetrical: as the last row in table 2 shows, less than one third of the links are reciprocal, meaning that only in a few cases do websites in the networked conversation mutually recognize each other as meaningful “interlocutors”.

Commento [AR1]: I think this is the kind of thing that referee 1 had in mind. By conversation do you mean relational dynamics? That is, is conversation a metaphor for the set of interactions among the website nodes?

Commento [EP2]: Yes, this is what we meant. See if the amended sentence makes this point more clear.

Commento [AR3]: i.e. isolated nodes without links?

Commento [EP4]: Yes. See if the amended sentence clarifies this point.

insert table 2 about here

The presence of selective conversational dynamics is further confirmed when looking at how the different actors’ groups interact, both between and within themselves.

Figure 2 shows a condensed visualization of the network illustrated in figure 1, where all nodes with the same TLD have been collapsed into a single node representing the actors’ group. In this figure, the strength of ties between nodes depends on the number of exchanges established between groups: the more intense the communication flow, the bolder the tie in the network illustration. As the figure shows, all groups are engaged in one or more communication flows. However, not all exchanges are characterized by the same intensity. Indeed, the most intense interactions are those entertained between the .org cluster with the .UN_org, the .com and the .org_local groups. Hence, although the conversation involves all types of actors, it seems to revolve mainly around a few stands of online communication mediated by civil society organizations.

The .org cluster’s internal density is 0.11. This implies that the online conversation within this group appears rather fragmented: civic organizations may be interested and engaged in some common issues, but divergence in terms of frames and normative perspectives is expected. This is not surprising given the richness and internal diversity of these organizations; yet, when it comes to promoting policy-relevant initiatives, such fragmentation may become a constraining factor. However, as noticed above, the .org cluster is the only one that can be defined as truly “trans-discursive” (Rogers 2010): interactions are established amongst its members but also with nodes belonging to other constituencies in the network (UN_org, .edu, .net e .com). In this sense, the civil

society component of the network seems to possess a more inclusive understanding of Web-based interactions and a more explicit interest in multi-stakeholder exchange.

Differently from the .org cluster, the sixteen organizations affiliated to the UN family are tied within a densely connected cluster where thirty per cent of the possible ties are activated. UN_org appears as the most cohesive group within the network and the elevated degree of connectedness in this cluster suggests the use of consistent terminology, shared understanding of issues, the possibility to activate the network around specific frames. However, the UN_org cluster also shows a strong self-referential attitude, as it hardly links to other constituencies in the network.

As far as the remaining clusters are concerned, the .com cluster does not show any level of internal connectedness as it is made up of twelve separate components. .com organizations clearly do not participate in this conversation as a group, yet they enter the network as a set of independent actors. Instead, the low level of internal connectedness that characterizes the .org_local cluster may be due to different factors: the internal heterogeneity of the group, the relevance of local conditions, the different languages being used, the different publics addressed.

insert figure 2 about here

3.4 Exploring power in online governance networks

The network features described above invite further exploration in search for actors that are better equipped to mobilize others around evolving and alternative issues that are relevant to the domain; that is, actors that are able to exert power in this context on the basis of their relational resources and understanding of Web-based interactions. In order to do so, we build on several accounts of power within networks (Freeman 2002[1979]; Gould and Fernandez 1989; Fernandez and Gould 1994; Kahler 2009) and on more recent readings that see power as strictly linked to communication dynamics within online networks (Castells 2012; Bennett and Segerberg 2014). More precisely, we lean on the idea of *network-making power*, understood as the power of programming, mobilizing and coordinating different strands of discourse within online networks (see also Castells 2011). Thus, we focus on nodes that, as incumbents of a certain structural position, can exert different levels of control over the discursive dynamics of meaning construction in online networks.

We distinguish between three main roles, each corresponding to a different form of power on the basis of nodes' structural position:

- *Programmers* - nodes that are capable of setting the discourse for the network and define the substantive framework of the conversation, taking advantage of the broad recognition they enjoy within the network. Nodes playing this role are those characterized

Commento [AR5]: Or, as expected?

Commento [EP6]: We did not formulate any clear hypothesis at the beginning of the empirical section, so we would refrain from starting with any "expectation". See if the amended sentence helps clarifying this point.

by a high indegree (Freeman 2002[1979]), i.e., they receive a high number of hyperlinks within online communication networks;

- *Mobilizers* - nodes that operate within the network with a broad understanding of both the actors involved and the issues at stake, while implementing the network's relational potential by reaching out in different directions. Nodes playing this role are those characterized by a high outdegree (Freeman 2002[1979]), i.e., they send many hyperlinks to other actors in the online issue network;

- *Switchers* - nodes that are in a position to connect subsections of the network as well as to connect to other meaningful networks. Actors playing this role reach high scores of brokerage (Gould and Fernandez 1989, Fernandez and Gould 1994), i.e., they exert a function of intermediation between groups in the online network, more than other nodes.

Table 3 shows *programmers* in the GoC_Gov network in the Goc_Gov issue network.

Overall, *programmers* are long-term established organizations, of both intergovernmental and nongovernmental nature, operating in key but not necessarily connected areas: human rights, women's issues at large, development, violence against women and, to a certain extent, the explicit nexus between gender and media.

insert table 3 about here

UN institutions stand out as the most central actors, receiving the highest recognition from the network; hence they are the most powerful discourse setters. This result suggests that the online conversation on Goc_Gov revolves around an institutional perspective, which has historically linked gender-related normative standards to a general attention for human rights, peace and development (the UN and, to a lesser extent, UNDP) as well as to a specific concern for women's empowerment (UN Women and Unifem). UN agencies therefore seem to promote awareness of the causes of concern and are capable of making their position and activities in the gender and media field well known to other actors.

However, programmers are not only of governmental nature. Well-established civil society realities such as Isis International and AMARC – respectively, an international organization that has been promoting women's empowerment since the early '70s; and the Women's International Network of the World Association of Community Radios working to ensure women's right to communicate - enjoy wide recognition from others in the online network. Their prominent position follows from their long term and sustained engagement in the field, as well as from their high level of activism also in local contexts, sometimes carried on with an explicitly critical approach towards institutional approaches.⁴

Commento [EP7]: Here you raised a concern about "prestige" inferred from network position. Knoke and Burt in 1983 associated prestige with indegree, so we basically employed the two terms as synonyms. However, we did not include a proper reference and, therefore, this conceptual shift was not so evident. We propose this amended version that eliminates the idea of "prestige" and introduces more directly the results in table 4.

As mentioned above, *mobilizers* are actors showing a particular propensity towards stimulating the online conversation as well as the capacity to activate the network's relational potential. Thus, they exert the power to foster, expand and transform ideas and frames globally by "reaching out" to others and contributing to interested actors' perception and understanding of existing challenges and available solutions.

In the Goc_Gov online issue network, the role of mobilizers is mainly played out by civil society organizations, the most active being the Women's Institute for Freedom of the Press (WIFP), a North American organization with educational purposes; the Center for Women's Global Leadership (CWGL), also a US organization which operates to strengthen and facilitate women's leadership for human rights and social justice worldwide; and Women in the Media and News (wimnonline), a very active US-based media analysis, education and advocacy group founded in 2001 (see table 4). Also noteworthy are the International Women's Tribune Council (IWTC), that has been active since the mid '70s to share and spread information amongst women's transnational movements; and the World Association for Christian Communication (WACC) with its "companion" whomakesthenews.org, the website of the Global Media Monitoring Project, a world-renowned and widely participated monitoring project. As results in table 4 clearly show, UN agencies do not operate as mobilizers, if not through the specific agency Unifem and the general un.org website.

insert table 4 about here

Finally, brokerage measures can be used to map out which actors are in a better position to connect subsections of the network. Brokerage is defined as a process in which intermediaries mediate interactions between pairs of actors that are not directly connected (Gould and Fernandez 1989:91-93). In this mediation process, the affiliation to subgroups of both the broker and the actors lacking access to one another is important as it influences the type of intermediation that is played out (*ibid.*). More specifically, Gould and Fernandez identify three brokerage roles that entail a mediation between different groups and, hence, reflect the kind of network-making power that is exercised by those we have defined as *switchers*, i.e., actors who control the flows of communication across the network. When two groups are involved, an actor can serve as a *gatekeeper*, when she stands in a position that allows her to grant or block outsiders from accessing her group; or as a *representative*, when she is in a favourable position to approach members of the other group. Conversely, when three different groups of actors are involved, an actor can become a *liaison* when she occupies a position that allows her to bridge two groups different from her own.⁵

Table 5 shows the ten nodes in the network with higher scores for the three-abovementioned brokerage measures.⁶

insert table 5 about here

What we notice here is that UN_org sites engage in discursive interactions not only as programmers, as seen above, but also as *gatekeepers* - mostly controlling flows coming to the UN group from transnational and national civic organizations. Moreover, un.org and unwomen.org also act as representatives towards other institutional spaces (.eu) and non-governmental actors (.org and .net), hence making an effort to promote the institutional principled perspective across a multi-stakeholder constituency.

Civic organizations - such as iwmf.org, isiswomen.org and wipf.org - perform mainly *representative* roles, connecting the perspectives of civil society to other groups (mostly .com) in the network, with isiswomen.org also acting as a gatekeeper for its group. By coordinating within their group while connecting to the outside, these groups may serve to consolidate and/or foster alternative perspectives and enlarge the scope of the global conversation around gender and media.

Finally, the only academic node in the network, cwgl.rutgers.edu, only plays a *liaison* role, which is consistent with previous findings about its position as mobilizer: this node operates as a “knowledgeable outsider” that contributes to connect diverse groups as well as consulting within groups such as .org, .org_local and UN_org.⁷

Two specific cases are worth mentioning. One is Unifem, which appears as the most eclectic broker within the UN family in spite of no longer operating in autonomy as it has become part of UN Women in 2010. Unifem.org operates as a liaison between transnational and local organizations, while acting as a consultant for civil society groups and a gatekeeper of flows from .edu, .eu and .org towards the UN system. This multi-faceted role suggests that Unifem is, within network-making dynamics in the GoC_Gov domain, a potentially powerful node, certainly more prominent than other UN agencies.

The other interesting case is iknowpolitics.org, the International Knowledge Network of Women in Politics, whose declared aim is to increase the participation and effectiveness of women in political life by utilizing Web-based technologies. It operates by creating knowledge and sharing experiences through the Web and this helps explaining its liaison position in the network as well as that of gatekeeper of discursive flows coming to civil society from the UN (and, to a lesser extent, from .edu and .eu).

4. Conclusions

In this article, we explored the nexus between the networking and participatory potential of ICTs and the transformation of governance processes. We started by sharpening the intrinsic value of a network approach for the study of ideational elements underpinning global governance, and we then

translated our argument into empirical terms by focussing on a set of diverse actors operating in the global domain of “gender-oriented communication governance”. We traced and analysed the GoC_Gov online thematic network through the use of the Issue Crawler software; we described the structure of the network as a multi-actor thematic conversation on the Web; finally, we looked at power dynamics that are played out in the online space, and argued that actors can exert different forms of control over the formation and consolidation of frames by acting online as *programmers*, *mobilizers* and/or *switchers*. In these concluding remarks, we summarize the main findings in relation to our main concerns: how do actors of different nature engage in online interaction harnessing ICTs’ participatory potential; and what type of influence follows from participating in online exchanges. Finally, we highlight some open issues that invite further exploration.

In the domain under investigation, alongside institutional actors, a number of civic organizations are involved, some of which with a long-term experience in the field and some as more recent participants. On the one hand, this cluster of civic actors does not appear very cohesive. On the other hand, civil society actors seem to be the ones who are most concerned with making fruitful use of the relational potential of ICTs. By adopting a “trans-discursive” linking behaviour, they exploit Web-interactions in an inclusive fashion and operate mainly as *mobilizers*: they are well positioned to foster and globally disseminate ideas and frames by “reaching out” to others and exerting the power of connecting the perspectives emerging from their group to other constituencies.

The other major group in the network, constituted by UN agencies and international organizations, emerges as a much more cohesive cluster, while showing a quite different approach to interacting online. UN institutions act mostly as *programmers* as they are widely recognized by others in the network as those who set the discursive framework; but they also express a self-referential attitude and tend to operate as *gatekeepers* of incoming flows from other stakeholders. In so doing, intergovernmental organizations exert a form of power that does not seem to foster the diffusion of the very principled frameworks they have elaborated in documents and implemented through programmes.

No other group seems to operate in a coordinated manner in the online network: news sites and private entities appear as completely disconnected from the rest of the network, while local and national organizations play peripheral roles.

These results provide interesting insights into actors’ perception and understanding of the potential of online interactions in today’s global governance, which can be articulated at different levels.

GoC_Gov as a domain shows that governance dynamics have indeed changed: different

actors enter networked interactions, and these are supported by network infrastructures. Nevertheless, these networks do not seem to be highly inclusive or conducive to truly diverse conversations. A persistent tendency towards forming online homogenous groups - that has been identified also in relation to political conversations amongst individuals (see the idea of “cavernous echo-chambers” in Boyd [2008]) – is also at play in this domain. This still occurs in spite of the fact that global governance processes are currently expected to be open to participation, on the basis of both a widely diffused “multi-stakeholder rhetoric” and assumptions about availability and accessibility of information technologies. Our case study suggests that, often, *old* ways of conceiving actors’ interactions accompany the implementation of *new* communication tools. It remains to be seen under what conditions ICTs can not only create new communicative spaces but also more participatory ones.

Our findings also suggest that the online discursive space is quite diverse and not really cohesive; a situation that may hinder the possibility for the actors involved to consolidate frames and to inform policy decisions. Such lack of cohesion becomes particularly problematic in relation to a major challenge for the international community – that of promoting gender equality globally. In the discursive context of gender equality, the nexus between gender and media has been quite marginal for a long time (Gallagher 2011). This peripheral position may well derive (also) from the absence of a more coherent and widely shared frame on the roles and centrality of the media in relation to the overall equality goal. By not showing a sincere interest in linking to others, institutionalized actors may miss the opportunity to gain new and relevant insights into gender-related challenges that may emerge from digital transformations, such as those related to access, usage, and ICT-enhanced working environments. On the other hand, fragmentation among civic organizations, in spite of their mobilizing potential, may prevent the consolidation of forward-looking frames grounded in the concrete practices they have direct experience of. Private and news entities may contribute to raising awareness on gender and media challenges, but they do so without engaging with the broader frames promoted by the more connected actors in the network.

Of interest here are also the “absences” in the network: scholarly and epistemic communities and media organizations alike do not seem to be (interested in) engaging in this discursive space. Since these actors produce relevant knowledges and cultural practices in this specific domain, and often participate in political negotiations, their absence from the online network invites further investigation on the actual spaces through which, both offline and online, they may be exerting forms of power in defining frames and normative standards and in fostering their implementation.

Finally, the availability of a pervasive networked infrastructure does not automatically produce meaningful interactions, which instead seem to derive from human interest and

understanding of new communication environments. Hence, a reflection should be made around actors' competent and intentional use of communication technologies. Our case study suggests that awareness and clear expectations from interaction through ICTs may translate into more effective, inclusive (but also exclusive) and possibly strategic exchanges in the online space. Actors making use of ICTs in due consideration of their potential to connect different stakeholders and networks may contribute to developing and disseminating frames. Some may do so by strengthening their roles as agenda setters, and use ICTs accordingly, thus becoming – according to our framework – programmers; others may concentrate on strategically reaching out to specific constituencies, thus acting –in our terms - as mobilizers. Further exploration in global actors' digital competence, communicative awareness and intentional use of available ICTs, will contribute to better understand how global governance is transformed by information technologies.

Clearly, what we presented here is just an insight of a much broader and complex dynamic. A more articulated understanding of networked governing arrangements in the global context would require linking relational patterns with the actual content of networked interactions. Initial explorations in this direction (Padovani and Pavan 2013) have, in fact, confirmed the relevance of combining structural and semantic analyses when investigating actors' capacity to orient the frames and normative foundations of global networks. Moreover, the investigation of online discursive exchanges should be paralleled by a thorough exploration of offline governance mechanisms to fully grasp the complexities of global governance today.

Through this initial exploration, our goal was to suggest that online interactions are a meaningful space to investigate in order to grasp a better understanding of how ideational and discursive elements may be shaped and transformed in an increasingly mediated global environment. A focus on networking practices and linking behaviours can shed light on different actors' communicative attitudes and provides a more nuanced reading of actors' capacity to implement the relational potential of ICTs. At the same time, it indicates interesting ways in which global actors may (learn to) exert forms of power - such as programming, mobilizing and connecting networks - that are core to structuring the discursive space of governing arrangements.

Acknowledgements and funding

In accordance with Italian academic conventions, we specify that Claudia Padovani wrote the sections titled “Introduction”, “Multi-actor networked governance, ICTs and power”, “The case study: “gender-oriented communication governance””, “Conclusions”, and Elena Pavan wrote the sections titled “Methods: mapping the online issue network”, “Network interactions and linking behaviour”, “Exploring power in online governance networks”. The authors would like to thank the

anonymous reviewers and the journal's editors for their useful comments and suggestions.

Claudia Padovani would like to acknowledge support of the University of Padova for the realization of the research project *Networks and Power in Gender-oriented Communication Governance* (2010).

Elena Pavan would like to acknowledge the support of the Provincia Autonoma di Trento (Post-doc 2011 grant) for the realization of the research project *REACTiON – Collective Action Networks between Online and Offline Interactions*.

Endnotes

¹ On the base of research activities, more than 150 profiles have also been created in a publicly accessible database - the Mapping Global Media Policy platform (www.globalmediapolicy.net) – where the “Gender and Media” thematic section is accessible at <http://www.globalmediapolicy.net/node/849>.

² <http://www.issuecrawler.net>. For details about setting the tool for analyses and scenarios of use see: http://www.govcom.org/Issuecrawler_instructions.htm.

³ As TLDs are attributed based on a very broad evaluation of the nature of actors or resources associated with them, clustering on their base can produce very heterogeneous groups. We therefore refined the crawler results by considering United Nations agencies (UN_org) as separated from civil society organizations (.org) and grouping all local TLDs under the same group labeled org_Local.

⁴ Semantic analyses conducted on the same online network, which are not presented here because of space constraints (but see Padovani and Pavan 2013), showed that these actors tend to overemphasize the causes of inequalities and in general appear to speak in their own terms and vocabulary, thus contributing to enriching more consolidated and institutionally agreed upon normative perspectives.

⁵ Gould and Fernandez also foresee two other brokerage roles, i.e., that of *coordinator* and that of the cosmopolitan or itinerant broker. However, as these two roles entail a mediation effect in relation to actors that belong to the same group, they are not consistent with our definition of switchers.

⁶ The partition criterion to identify groups is the membership in one of the nine stakeholders/actors groups identified in our issue network.

⁷ The analysis of the content of online interactions has shown that CWGL plays a liaison role on the basis of a normative stand focused on leadership and women's advancement and not on women and media.

References

Aptorp, R. and D. Gasper (eds) (1996) *Arguing development policy: frames And discourses*, London and New York: Routledge.

Art, B. (2003) ‘Non-state actors in global governance: a power analysis’, paper presented at the ECPR Joint Workshop Sessions, Edinburgh, 28 March – 2 April.

Art, R. and R. Jervis (2009) *International politics: enduring concepts and contemporary issues*, New York: Pearson Longman.

- Atkinson, R., Held, G. and S. Jeffares (2011) 'Theories of discourse and narratives: what do they mean for governance and policy?', in R. Atkinson and G. Terizakis (eds) *Sustainability in EU Environmental Policy: Challenges of Governance and Knowledge*, London and New York: Routledge, 115-130.
- Baylis, J. and S. Smith (1997) *The globalization of world politics. An introduction to international relations*, Oxford: Oxford University Press.
- Benford, R. D. and D. A. Snow (2000) 'Framing processes and social movements: an overview and assessment', *Annual Review of Sociology* 26: 311-339.
- Benkler, Y. (2011) 'Networks of power, degrees of freedom', *International Journal of Communication*, 5: 721-755.
- Bennett, L.W. and A. Segerberg (2014) 'Three patterns of power in technology-enabled contention', *Mobilization: An International Journal*, 19(4): 421-439
- Berenskoetter, F. and M. Williams (eds) (2007). *Power in world politics*, New York: Taylor & Francis.
- Byerly, C.M. (2012) 'The geography of women and media scholarship', in K. Ross (ed) *The Handbook of Gender, Sex, and Media, First Edition*, Oxford: Blackwell Publishing, 3-19.
- Byerly, C. M. and K. Ross (2006) *Women and media: a critical introduction*, Oxford: Blackwell.
- Boyd, D. (2008) 'Can social network sites enable political action?', *International Journal of Media & Cultural Politics*, 4(2):241-244.
- Castells, M. (2009) *Communication power*, Oxford: Oxford University Press.
- Castells, M. (2011) 'A network theory of power', *International Journal of Communication* 5:773-787.
- Castells, M. (2012) *Networks of outrage and hope*, Cambridge: Polity Press.
- Dodds, F. (2002) 'The context: multi-stakeholder processes and global governance', in M. Hemmati (ed) *Multi-stakeholder processes for governance and sustainability: beyond deadlock and conflict*, London: Earthscan, 26-38.
- Dryzek, J.S. (2005) 'Deliberative democracy in divided societies: alternatives to agonism and analgesia', *Political Theory* 33(2): 218-242.
- Dryzek, J.S. (2006) *Deliberative global politics: discourse and democracy in a divided world*, Cambridge: Polity Press.

- Epstein, C. (2008) *The power of words in international relations. Birth of an anti-whaling discourse*, Cambridge: MIT Press.
- Fernandez, R. M. and R.V. Gould. (1994) 'A dilemma of state power: brokerage and influence in the national health policy domain', *The American Journal of Sociology* 99(6): 1455-1491.
- Finnemore, M. and K. Sikkink (1998) 'International norm dynamics and political change,' *International Organization* 52(4): 887-917.
- Freeman, L. C. (2002 [1979]) 'Centrality in social networks: conceptual clarifications', in J. Scott (ed) *Social networks: critical concepts in sociology (vol. I)*, London and New York: Routledge, 238–263.
- Gallagher, M. (2011) 'Gender and communication policy: struggling for space', in R. Mansell and M. Raboy (eds) *The Handbook of global media and communication policy*, Oxford: Wiley-Blackwell, 451-466.
- Gould, R.V. and R. M. Fernandez (1989). 'Structures of mediation: a formal approach to brokerage in transaction networks', *Sociological Methodology* 19: 89-126.
- Guzzini, S. (2007) 'The concept of power: a constructivist analysis', in F. Berenskoetter and M. Williams (eds) *Power in world politics*, New York: Taylor & Francis, 23-42.
- Haas, P.M. (1992) 'Introduction: epistemic communities and international policy coordination', *International Organization* 46(1):1-35.
- Haugaard, M. and K. Ryan (eds) (2012) *Political power: the development of the field*, Berlin: Barbara Budrich Publishers.
- Held, D., and A. McGrew (eds) (2003) *The global transformations reader*, Cambridge: Polity Press.
- Held, D., A. McGrew, D. Goldblatt and J. Perraton (1999) *Global transformations: politics, economics, and culture*, Cambridge: Polity Press.
- Hemmati, M. (ed) (2002) *Multi-stakeholder processes for governance and sustainability: beyond deadlock and conflict*, London: Earthscan.
- Hewson, M., and T.J. Sinclair (eds) (1999) *Approaches to global governance theory*, Albany, NY: State University of New York Press.
- Howarth, D. and J. Torfing (eds)(2005) *Discourse theory in European politics, identity, policy and governance*, Basingstoke: Palgrave.

- Jensen, H. (2005) 'Gender and the WSIS process: war of the words', in Heinrich Böll Foundation (ed) *Visions in process*, Berlin: Heinrich Böll Foundation, 19-23.
- Kahler, M. (2009) 'Networked politics: agency, power and governance', in M. Kahler (ed) *Networked Politics: Agency, Power and Governance*, Ithaca, N.Y., and London: Cornell University Press, 1-20.
- Kaldor, M. (2003) *Global civil society. An answer to war*, Cambridge: Polity Press.
- Keane, J. (2003) *Global civil society?*, Cambridge: Cambridge University Press-
- Keck, M. E. and K. Sikkink (1998) *Activists beyond borders: advocacy networks in international politics*, New York: Cornell University Press.
- Kenis, P. and V. Schneider (1991) 'Policy network and policy analysis: scrutinizing a new analytical toolbox', in B. Marin and R. Mainz (eds) *Policy networks: empirical evidence and theoretical considerations*, Boulder: Westview Press, 25–62.
- Kooiman, J. (2003) *Governing as governance*, London: Sage Publications.
- Lukes, S. (2005[1974]) *Power: a radical view*, London: Macmillan.
- Nye, J. (2011) *The Future of power*, New York: Public Affairs.
- Padovani, C. and E. Pavan (2011) 'Actors and interactions in global communication governance: the heuristic potential of a network approach', in R. Mansell and M. Raboy (eds) *The Handbook of Global Media and Communication Policy*, Oxford: Wiley-Blackwell, 543-563.
- Padovani C. and E. Pavan (2013) 'Exploring power in supra-national Gender-Oriented Communication Governance. Norms' diffusion through online networks', paper presented at the XXXIII INSNA Sunbelt Conference, Hamburg, 21 – 26 May.
- Padovani C. and E. Pavan (forthcoming) 'Networks and power in gender-oriented communication governance. Linking theory to empirical explorations', in N. Chitty (ed.) *China, US and the world. Theatres of Soft Power*, Beijing: Chinese Communication University Press.
- Pavan E. (2012) *Frames and Connections in the Governance of Global Communications. A network study of the Internet Governance Forum*, Lanham MD: Lexington Books.
- Pavan, E. (2014) 'Embedding Digital Communications within Collective Action Networks. A Multidimensional Network Approach', *Mobilization: An International Journal* 19(4):441-455.
- Risse, T. (2000) 'Let's argue! Communicative action in world politics', *European Journal of International Relations* 6: 395–422.

Rogers, R. (2004) *Information politics on the Web*, Cambridge, London: MIT Press.

Rogers, R. (2010) 'Mapping Web space with the Issue Crawler', available at http://www.govcom.org/full_list.html.

Sarikakis, K. and L. Shade (eds) (2008) *Feminist interventions in international communication*, Lanham, MD: Rowman and Littlefield.

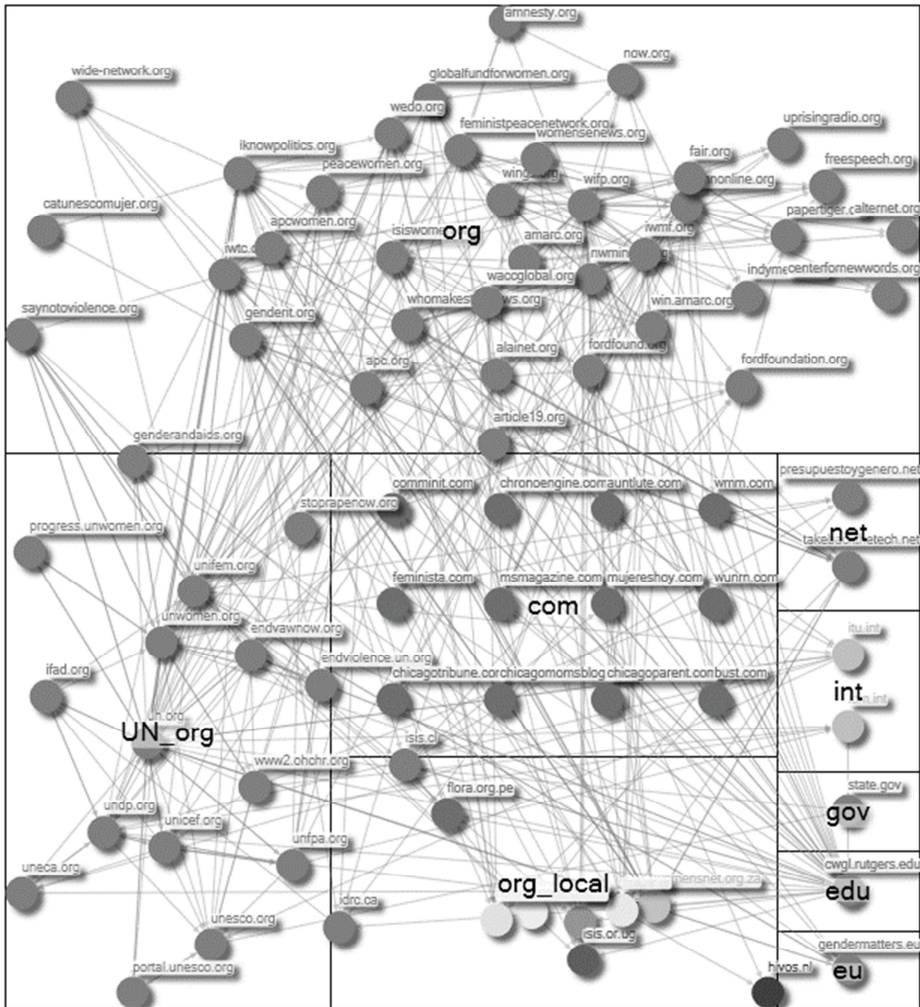
Smith, J., C. Chatfield and R. Pagnucco (eds) (1997) *Transnational social movements and global politics. Solidarity beyond the state*, New York: Syracuse University Press.

Wiener, A. (2008) *The invisible constitution of politics. Contested norms and international encounters*, Cambridge: Cambridge University Press.

Appendix

insert table 6 about here

Fig.1 - Gender and Media online thematic network



NOTE: Crawl Setting: Method=co-link analysis; Iterations=2; Crawl depth=2. The graph is reproduced through NodeXL (<http://nodexl.codeplex.com/>). Visualization algorithm= Harel-Koren Fast Multiscale; Strength of repulsive force between vertices=100; iterations per layout=100.

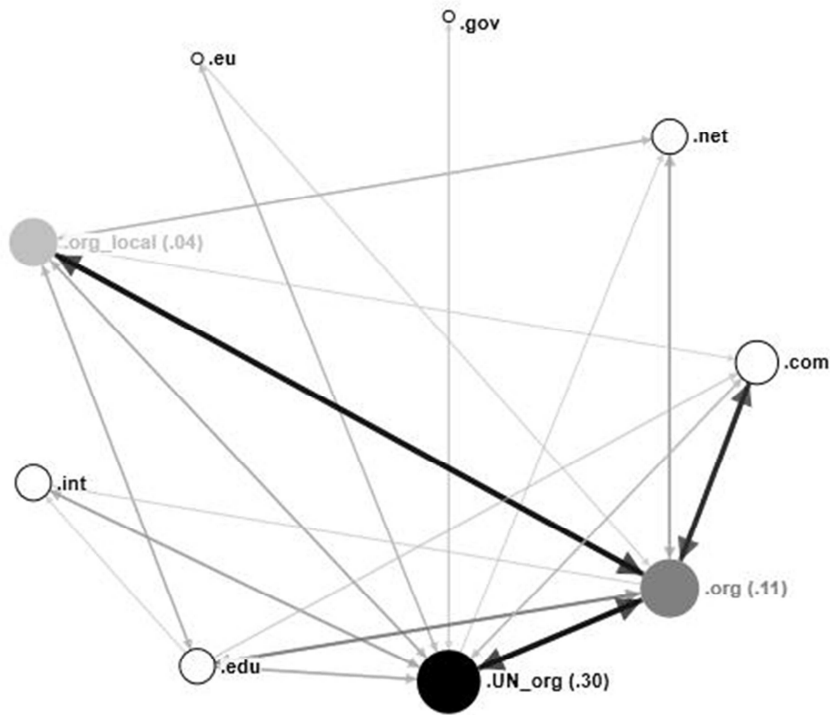
Tab. 1 – Size of clusters in the Goc_Gov online issue network

Clusters	Description	Number of nodes	%
.org	Civil Society, non-governmental, non-commercial organizations, association and resources	36	44,4
.UN_org	United Nations institutions and agencies	16	19,8
.com	Commercial entities	12	14,8
.org_local	Local non-governmental organizations, associations and resources	10	12,3
.int	International Governmental Organizations	2	2,5
.net	Non-governmental networked platforms	2	2,5
.edu	Educational entities	1	1,2
.eu	European Governmental entities	1	1,2
.gov	National Governmental entities	1	1,2
	Total	81	100

Tab. 2 - Network measures

Graph metrics	Value
Vertices	81
Total Edges	441
Graph density	0,07
Reciprocal Edges	128

Fig. 2 – Exchange between Top Level Domains-based groups in the semantic network



NOTE: Nodes' size and shade is proportional to indegree; edge width and opacity is proportional to edge weight. Numbers between brackets correspond to the density of exchange within groups internally connected.

Tab. 3 – Programmers in the GoC_Gov online issue network (nodes with higher indegree values)

Programmers	Indegree
un.org	27
unwomen.org	18
undp.org	12
unifem.org	11
isiswomen.org	10
amarc.org	10
fire.or.cr	10
peacewomen.org	9
stoprapenow.org	9

Programmers	Indegree
iwmf.org	9
unesco.org	9
Mean indegree	5
S.D.	4

Tab. 4 – Mobilizers in the GoC_Gov online issue network (nodes with higher outdegree values)

Mobilizers	Outdegree
wifp.org	32
cwgl.rutgers.edu	32
iwmf.org	26
wimnonline.org	21
unifem.org	19
iknowpolitics.org	17
un.org	17
waccglobal.org	14
iwtc.org	14
whomakesthenews.org	14
genderit.org	13
Mean outdegree	6
S.D.	7

Tab. 5 – Top 10 vertices in GoC_Gov network by brokerage score

	Gatekeeper	Representative	Liaison	Total
un.org	119.693	25.083	29.333	241.993
iwmf.org	10.833	32.583	5	127.553
unwomen.org	29.983	22.833	6.167	101.1
unifem.org	27.567	16.167	35.917	99.933
cwgl.rutgers.edu	0	0	69.976	95.643

	Gatekeeper	Representative	Liaison	Total
iknowpolitics.org	25.367	3.667	14.917	48.933
isiswomen.org	8.417	12.426	6.833	48.26
wimnonline.org	0	17.25	0	43.417
wifp.org	0	27.333	0	39.117
undp.org	13.7	2.583	2.167	32.483

Note: Method for Brokerage measurement=Weighted.

Tab. 6 – List of starting points for the GoC_Gov issue network

Name	URL
ALAI	http://alainet.org/
WSIS Gender Caucus	http://genderwsis.org/
NGO Gender Strategies Working Group	http://ngo-wsis.genderit.org/
Women's International Network	http://win.amarc.org
Women's Media Watch Jamaica	http://womensmediawatch.org/
Association for Progressive Communications - Women's Networking Support Programme	http://www.apcwomen.org
Artemisia Comunicacion	http://www.artemisanoticias.com.ar/site/default.asp
Comunicación e Información de la Mujer	http://www.cimac.org.mx
Permanent Conference of the Mediterranean Audiovisual Operators	http://www.copeam.org
GenderLinks	http://www.genderlinks.org.za/
International Association of Women in Radio and Television	http://www.iawrt.org
IFJ	http://www.ifj.org/en
Gender and Internet Governance	http://www.intgovforum.org/cms/dynamic-coalitions/77-gender-and-ig
Inter Press Service	http://www.ips.org
Isis Santiago	http://www.isis.cl/
Isis Wicce	http://www.isis.or.ug
Isis Manila	http://www.isiswomen.org
International Taskforce on	http://www.itfwomenict.org

Name	URL
Women and Information and Communication Technologies (ITF)	
ITU WG on Gender Issues	http://www.itu.int/gender/index.html
International Women's Media Foundation	http://www.iwmf.org/
International Women's Tribune Center	http://www.iwtc.org
Southern Africa Media and Gender Institute	http://www.samgi.org.za/
Geena Davis Institute	http://www.thegeenadavisinstitute.org/index.php
International Research and Training Institute for the Advancement of Women	http://www.un-instraw.org
Commission on the Status of Women	http://www.un.org/womenwatch/daw/csw/
Inter-Agency Network on Women and Gender Equality	http://www.un.org/womenwatch/ianwge/
Office of the Special Adviser on Gender Issues and Advancement of Women	http://www.un.org/womenwatch/osagi/gendermainstreaming.htm
UNESCO Communication and Information Sector	http://www.unesco.org/new/en/communication-and-information/
UNESCO Division for Gender Equality	http://www.unesco.org/new/en/unesco/themes/gender-equality/
United Nations Development Fund for Women	http://www.unifem.org
UN Division for the Advancement of Women & United Nations Entity for Gender Equality and the Empowerment of Women	http://www.unwomen.org/
Wacc	http://www.waccglobal.org/
Women's Institute for Freedom of the Press	http://www.wifp.org
WIGSAT	http://www.wigsat.org/
Women in Media and News	http://www.wimnonline.org/
WITNET	http://www.witnet.org/index.php
European's Women Lobby	http://www.womenlobby.org/?lang=en
Women'sNet	http://www.womensnet.org.za/
Women's Radio Fund	http://www.womensradiofund.org/
Committee on the Elimination	http://www2.ohchr.org/english/bodies/cedaw/index.htm

Name	URL
of All Forms of Discrimination Against Women	