



DEFINING AND MEASURING TECHNOLOGY-FACILITATED GENDER-BASED VIOLENCE

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I. WHAT IS TECHNOLOGY-FACILITATED GENDER-BASED VIOLENCE?

The rapid spread of internet and mobile technologies has facilitated growth and development across the world. At the same time, the ubiquity of digital technologies has raised new human rights and safety concerns. Cyberbullying, online harassment and cyberstalking are all too common, but these terms fail to capture the spectrum of violent behaviors that occur in digital spaces and disproportionately affect women, girls and sexual minorities.

Without first acknowledging the full range of gender-based violence enacted online or via technology, we will not be equipped to prevent it and effectively support those who experience it. To that end, we define technology-facilitated gender-based violence (GBV) as:

"Action by one or more people that harms others based on their sexual or gender identity or by enforcing harmful gender norms. This action is carried out using the internet and/or mobile technology and includes stalking, bullying, sex-based harassment, defamation, hate speech, exploitation and gendertrolling." (Hinson, Mueller, O'Brien-Milne, & Wandera, 2018)

A Complex and Pervasive Problem

Growing evidence suggests that technology-facilitated GBV is a complex and pervasive issue, with a third of internet users in South Africa and Kenya and almost three quarters of users in the United States reporting some form of online harassment (African Development Bank Group [ADBG], 2016; Burton & Mutongwizo, 2009; Duggan, 2014, 2017). Technology-facilitated GBV can have severe and far-reaching psychological, physical, social and economic impacts on the lives of victims/survivors and their families. Moreover, internet and mobile technologies can facilitate the spillover

of real-life violence to the online world, as well as the simultaneous perpetration of online and offline forms of GBV - aggravating the already-compromised safety and well-being of those experiencing it (Backe, Lilleston, & McCleary-Sills, 2018; Lehart, Ybarra, Zickuhr, & Price-Feeney, 2016a; Lenhart, Ybarra, & Price-Feeney, 2016b; Thakur, 2018).

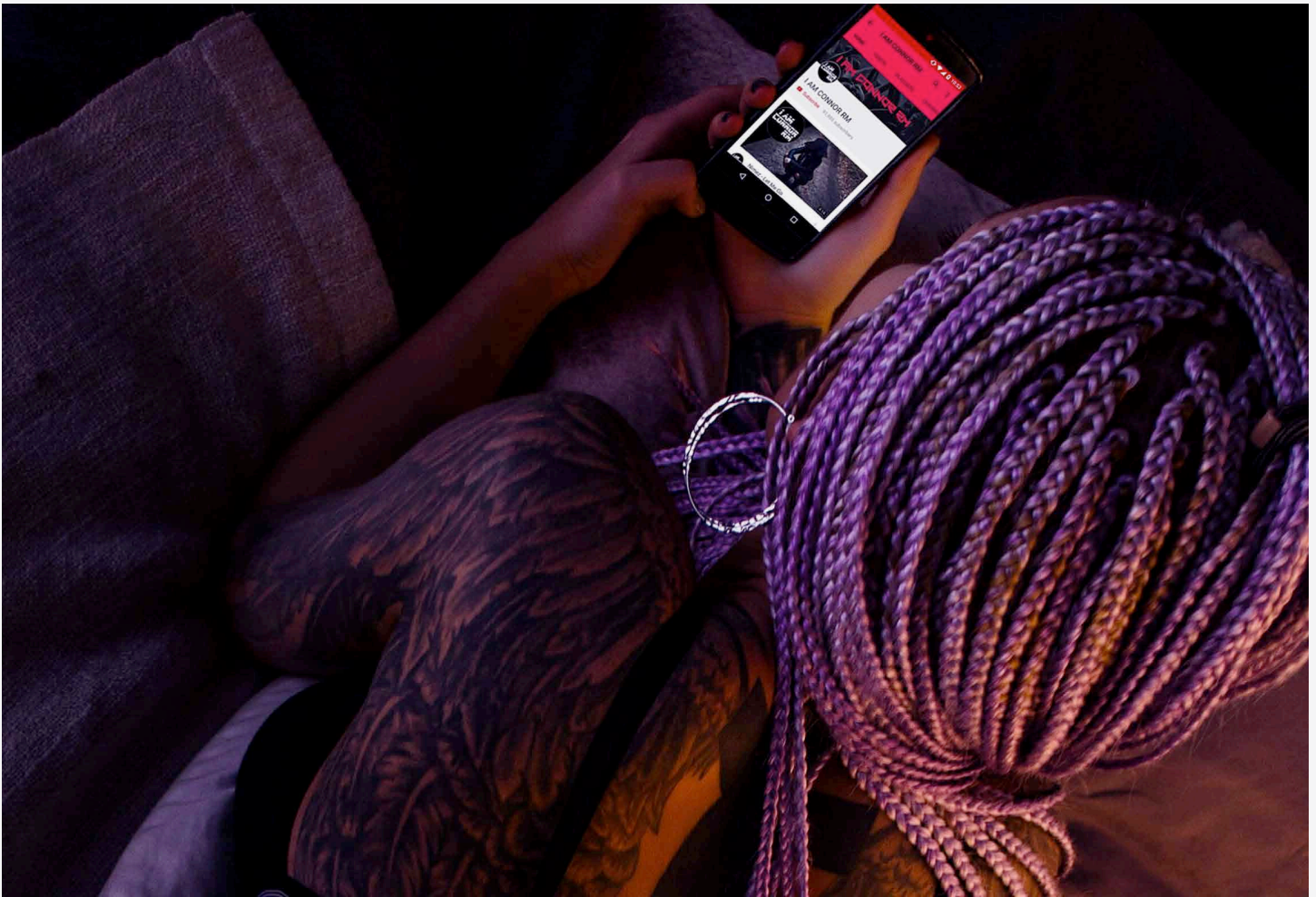
Where Do We Go From Here?

Despite the increasing prevalence and harmful effects of technology-facilitated GBV, there is limited research on how to best assess or measure it, much less prevent it (Backe et al., 2018). With standard measures and better data, we can leverage resources to prevent it and support those who experience it. Supported by the World Bank Group and the Sexual Violence Research Initiative from 2017-2018, the International Center for Research on Women (ICRW) conducted research to inform the development of standardized measures that can be used to study technology-facilitated GBV across various settings and populations, with a focus on low- and middle-income countries (LMICs).

II. WHAT ICRW HAS DONE TO ADVANCE THE FIELD

We began by identifying, cataloging and consolidating existing definitions, tools and methodologies for measuring technology-facilitated GBV through a review of existing gray and peer-reviewed literature (Backe, 2018). From this review, we developed a definition of technology-facilitated GBV. Our definition aims to comprehensively describe a range of aggressive and harmful behaviors perpetrated using the internet and mobile technologies.

Building on this definition and our review of existing research, we conducted key informant interviews with 18 experts from a range of professional and geographic backgrounds. From



these interviews we identified key themes that became the building blocks of a conceptual framework and quantitative measures. We hope our framework and measures will contribute to a consolidated understanding of technology-facilitated GBV and help to build a robust, cross-comparable evidence base.

Using a passive referral system through our networks, fliers and social media platforms, like Facebook group pages, we recruited participants for and then conducted six focus group discussions (FGDs) and 48 in-depth interviews (IDIs), equally split between Kampala, Uganda and Mumbai, India. Our main goal in this formative work was to understand how people experienced technology-facilitated GBV in these specific contexts and evaluate how effectively our approach and questions captured participants' actual experiences.

This research resulted in a comprehensive definition of technology-facilitated GBV, a conceptual framework (described below) and a draft set of quantitative measures that can be further validated and used to collect critical data on this important and emerging issue.

III. FINDINGS: THE CONCEPTUAL FRAMEWORK AND THE DRAFT SET OF MEASURES

Technology-facilitated GBV typically begins with a **relationship** between the perpetrator and the victim/survivor and ends with **help-seeking behaviors**. In between are the **motivations** and **intents** of the perpetrator; the frequency and duration of the experience (i.e. **incidence**); the specific technologies utilized to perpetrate the act (i.e. modes); the tactics employed and the resulting behaviors; and the **impacts** of the experience on the victim/survivor (Hinson et al., 2018).

After developing our initial framework, we determined that we couldn't feasibly measure or capture all these aspects in one survey. Therefore, we drafted measures for the aspects most critical to understanding the prevalence of technology-facilitated GBV. This entailed developing questions around the nature of the **relationship**, the **tactics** used and the **incidence** of the experience, along with whether the experience was gender-based and technology-facilitated.

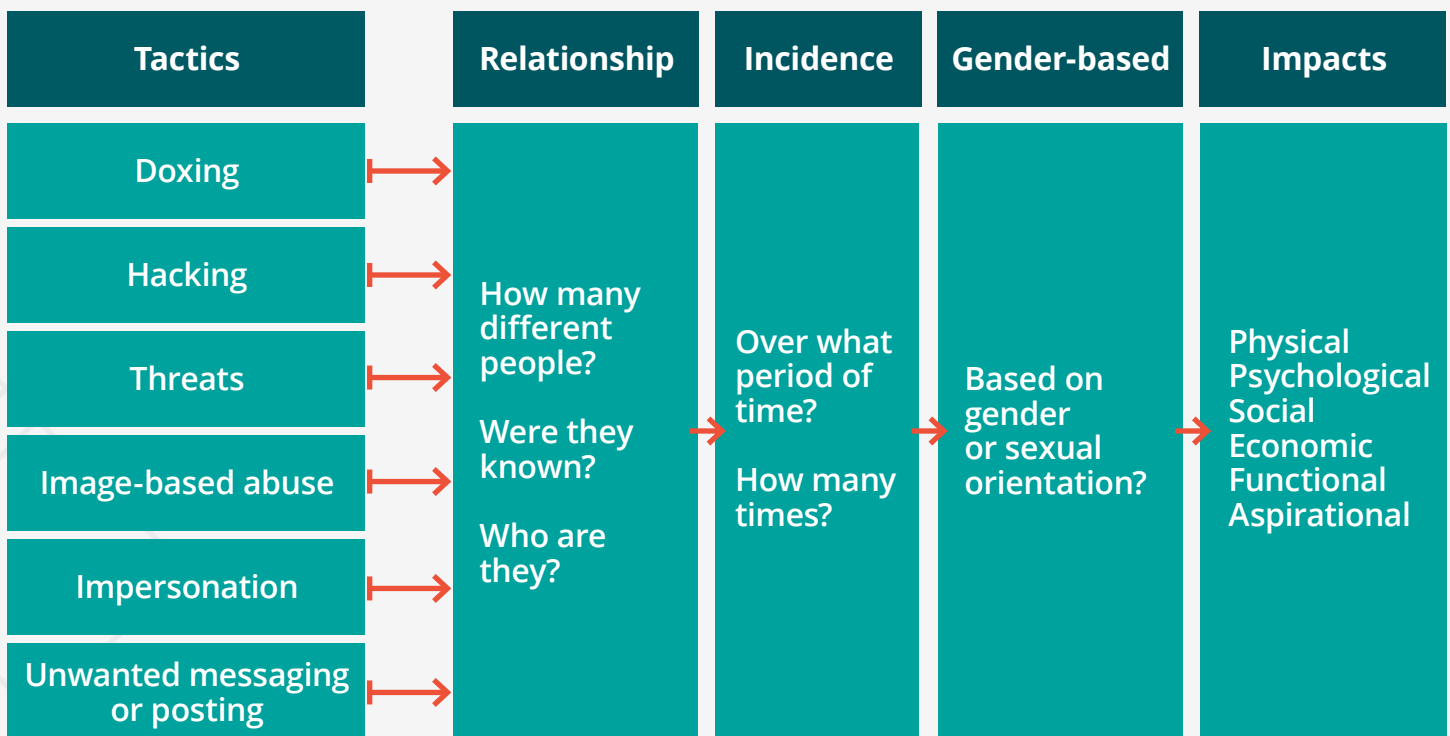
Through our iterative process, we tested various question formats, answer choices and question sequences. Our final module of questions (**Figure 1**) began by asking about **tactics**, specifically the various actions or strategies that utilize technology to harm or harass targeted individuals or groups. Using insights from the literature review and key informant interviews, we organized and defined six tactics that comprise the basis of nearly all forms of technology-facilitated GBV: *doxing, image-based abuse, hacking, threatening, impersonation and unwanted messaging or posting*. While some of these tactics, such as doxing and image-based abuse, have been previously defined, we saw a need to define others.

For each tactic that participants had experienced, we asked them additional questions about relationship, incidence, and impact related to that specific experience. To measure **relationship**, we asked how many perpetrators were involved, whether they were known or unknown to the victim/survivor, and if known, in what capacity (e.g. intimate partner, friend, coworker, etc). For **incidence**, we focused on first understanding the duration of the experienced tactic

(i.e. days, weeks, months) as well as how frequently they experienced it. The set of questions on **impact** asked for yes/no responses to psychological, physical, functional, social, economic and aspirational impacts of the experienced tactic on the victim/survivor.

We defined actions as **gender-based** if the victim/survivor was targeted due to their gender or if the tactic itself reinforced harmful gender norms. To ascertain this, we asked participants if they felt targeted because of their gender or sexual orientation. We determined whether an incident reinforced harmful gender norms via the participants' description of the experience. To confirm that the act of violence was **facilitated through technology** and distinct from other forms of violence, we embedded language around technology in the questions associated with each tactic. For example, for one of the questions around threatening tactics, we asked: "Have you ever had someone express to you through the internet, email or phone, a threat to physically harm you or someone you know?"

Figure 1. Sequence of Quantitative Questions During Interviews



IV. LESSONS LEARNED ABOUT MEASURING TECHNOLOGY-FACILITATED GBV

Throughout the iterative process used to develop our conceptual framework and quantitative measures, we learned several lessons related to measuring technology-facilitated GBV, as described below.

Lesson #1 – Determining a case definition for prevalence data is relatively straightforward, with a few caveats

We defined a case of technology-facilitated GBV as participants experiencing at least one tactic and if they were targeted due to their gender or sexual orientation or if the content of the incident reinforced harmful gender norms. We determined that any experienced tactic was violence, even if the tactic was only experienced once or if the victim/survivor believed that the perpetrator did not intend to cause harm. The practice of defining certain violent behaviors and asking participants whether they had experienced them is standard for obtaining comparable prevalence estimates of violence (Ellsberg & Heise, 2005).

Some of our participants did not perceive their experience as an attack on their gender or sexual orientation, or were uncertain about it, even though the research team believed otherwise. The qualitative nature of our work allowed us to gain insight on how gender played a role in the experience. For example, several women in Uganda experienced violence perpetrated by their partners' former partners. In these instances, they were targeted due to their relationship, not their gender. However, the content of the violent actions themselves – including publicly posting their sexual history and using slurs – were gender-based and often sexual in nature. Cases may be underreported if only a single quantitative question is used to assess whether the experience was gender-based.

Relatedly, ensuring that the questions for each tactic infused some element of technology was essential. We realized we would need to verify that technology was at the core of the action when, during our interviews, we learned that some participants were thinking of an offline experience that did not connect to experiences online.

Lesson #2 – Local context matters, but developing standardized measures that are globally applicable is possible

A key finding was that technology-facilitated GBV was simultaneously universal and context-dependent. For instance, image-based abuse, and particularly the release of sexually explicit images, was common across contexts, according to

our key informants and fieldwork participants. However, what was considered “sexually explicit” often depended on specific cultural norms. And while there were commonalities in terms of emotional injury such as sadness and anger, how individuals within their cultural contexts internalized and expressed those impacts differed. Additionally, the specific technologies utilized in this type of violence are reliant on the platforms available, which vary widely across the world.

Gathering information to measure prevalence can be relatively straightforward. However, developing standardized measures of prevalence means ensuring that the identified tactics and questions about them are capturing the range of localized expressions and permutations of this form of violence. Part of our goal was to ensure that the experiences participants shared in the qualitative interviews were surfaced by the quantitative measures—and we found that for the most part, they were. Most of the tactics described by participants in Uganda and India were similar, such as someone posting their identifiable information without their permission on a WhatsApp group (doxing) or continually posting sexist and/or lewd remarks on a Facebook page (unwanted messaging and posting).

Prevalence data that is cross-culturally comparable and stems from standardized measures is essential for understanding the scope and severity of the issue. However, while prevalence data can be comparable despite culturally-specific manifestations of violence, it does not illuminate these differences. A deeper understanding of how tactics are both common and distinct—along with the culturally-relevant impacts and help-seeking behaviors—is necessary to address and prevent technology-facilitated GBV effectively.

Lesson #3 – Balancing clarity and comprehensiveness in a quantitative survey tool is an ongoing journey

Any data collection tool must comprehensively reflect the experience, yet not overextend participants and the research team in their quest for valid and reliable data. We found that striking the right balance was more arduous than it first appeared. The interview was feasible if a participant experienced one tactic perpetrated by one person with few resulting impacts. However, for participants with extensive exposure to technology-facilitated GBV, such as those who had been targeted using multiple tactics or who had been abused by multiple individuals online, the interview became burdensome for participants and interviewers. This was compounded by our efforts to differentiate between specific incidents and to link individual tactics, relationships, and impacts, which required repeating each section of the survey for each experience of technology-facilitated GBV.

Researchers will need to break down a survey into smaller sections to focus on specific elements of this phenomenon without overburdening participants. One way to minimize burden can be to first identify the most traumatic or damaging experience and then focus on its implications. Alternatively, researchers can choose to focus on aspects like impacts or the help-seeking behaviors as a whole, without connecting them to each tactic separately.

Lesson #4 – Technology complicates definitions, experiences and measurement of GBV

One of the biggest challenges of researching this topic is that, in a world where technology allows people to connect so easily yet remain totally or partially anonymous, defining relationships within technology-facilitated GBV is extremely difficult. This anonymity extends the types of relationships in which this violence takes place to include impersonal and institutional relationships. For example, perpetrators clandestinely attack from fake accounts; when blocked, they created new ones and begin again. In addition to anonymity, technology creates new types of relationships. For example, acquaintances and strangers follow social media accounts and may begin to reach out and commit violence. Institutional violence (i.e. violence perpetrated by organizational, governmental or state actors) has also found new avenues via technology. All of this means that researchers face unique obstacles to measure perpetration accurately.

Technology is constantly evolving, which means that a popular platform of violence today may be passé tomorrow. As a result, standard measures listing specific apps, websites and social media platforms by name will rapidly become obsolete. While we found significant overlap in the platforms that were used most commonly to perpetrate harmful behaviors (e.g. WhatsApp and Facebook), there were many others unique to specific users, such as niche dating apps in India or unexpected

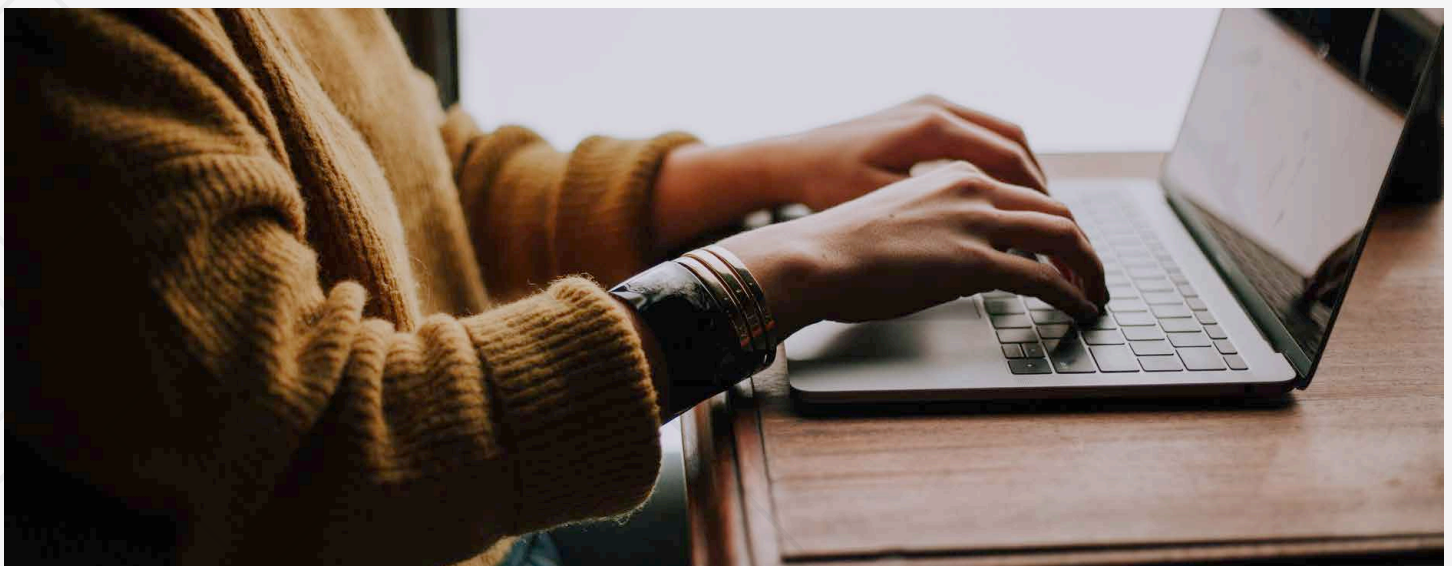
platforms like Amazon reviews. As a result, we decided to focus our tools on capturing the various platform categories, such as entertainment and communication sites. This enabled us to confirm that the issue was indeed facilitated through technology (which was critical to our case definition) but did not trap us into measuring something likely to change.

V. Next steps in researching technology-facilitated GBV

The use of technology to perpetrate and facilitate GBV is a growing phenomenon and a serious human rights violation. As technology continues to advance and become accessible at exponentially faster rates, policy makers, researchers, technology companies and other key stakeholders must acknowledge the urgent need to develop comprehensive, effective and timely solutions to technology-facilitated GBV. Digital technologies further perpetuate, facilitate and exacerbate conventional forms of GBV due to the anonymity of online presence, inadequate regulation and repercussion and the unprecedented speed and reach of the internet.

We need to develop reliable, valid and practical quantitative measures to understand the prevalence and experiences of the issue globally and take meaningful action locally. To accomplish this, based on our lessons learned, we have outlined four priority research areas:

- ◆ **Continue testing and validating quantitative measures.** We need robust, reliable and validated measure with global applicability to get prevalence data. With good prevalence data at city, regional and national levels, we can leverage change with governments, policy makers and program developers. A holistic and contextualized understanding of technology-facilitated GBV will require additional research that surfaces participants' varying definitions.



- ♦ **Conduct formative research and continue conceptualization.** This issue is growing, and there is much we still do not understand, especially in LMICs. We need to continue to investigate localized expressions of and impacts from this issue, including in-depth analysis with victim/survivors and perpetrators. We also need additional research with underrepresented groups such as LGBTI individuals.
- ♦ **Develop robust studies to understand nuances and lasting impacts.** In addition to understanding prevalence and experiences, we need well-designed studies that allow us to understand little-known aspects such as the connection between offline and online violence. In addition, longitudinal studies can shed light on the long-lasting impacts of this issue.
- ♦ **Integrate technology-facilitated GBV into GBV studies more broadly.** Studies on GBV should consider including at minimum basic questions that capture experiences with technology-related GBV. This is essential for understanding the connections between online and offline violence. Similarly, the increasing interest in ‘cyberbullying’ among young people must recognize the specific, gendered nature of technology-facilitated GBV as a distinct form of violence.

Universal measures and prevalence estimates are essential to demonstrating the global nature and scope of this problem. Prevalence, though, is just one tool for understanding and addressing technology-facilitated GBV. The highly context-dependent nature of each domain of technology-facilitated GBV is necessary to design effective responses. Building a consistent and nuanced understanding will consequently inform design, implementation and evaluation of essential interventions. Conducting this research with strong ethical standards, especially for young people, is essential.

In a connected and anonymous world, researchers face unprecedented new challenges that are forcing us to grapple with how we’ve always worked. The stakes are high. But together, we can transform new challenges into useful new tools for naming, documenting and – ultimately - preventing technology-facilitated gender-based violence.

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www.icrw.org

T 202.797.0007 • F 202.797.0020

1120 20th Street NW • Suite 500 North, Washington, DC 20036