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**GISF Podcast Series**

**Evolving NGO Security Risk Management**

**Episode 3. Humanitarian Notification Systems: unpacking the complexities and possibilities**

**Total Time:** 36:56

**Speakers**  
Host: Tara Arthur (GISF)  
Guest: Rob Grace (Brown University and MIT)

**Transcript**

**Tara Arthur 00:10**

In recent years, humanitarian responses have been complicated by compounding crises, such as climate change epidemics and pandemics in complex conflicts, and an ever-changing humanitarian and development space. We ask, what does the security and safety of aid workers look like? And what might it look like in the future? I'm Tara Arthur, from the global Interagency Security Forum. In each episode, I'll be speaking to guests about topics, such as the localization of aid, the ups and downs of community acceptance, and the role of security and a digital world. Join me as we unpack the evolutions of NGO security risk management. Hi, Rob, welcome to today's episode, how are you today,

**Rob Grace 00:59**

we're doing pretty well. Excited to be here. Thanks for having me.

**Tara Arthur 1:03**

We're looking forward to a fun conversation and talking a lot about different things. But maybe we could start with a little bit about you. And also, I before we even jump into a little bit about you just acknowledging that you've been part of a lot of initiatives with GISF. And I don't know if you might want to highlight any. And of course, there might be many and you might not remember all of them off the top of your heads. But maybe you can sprinkle a few of those into a little introduction about yourself. And then we could talk a little bit more about how you got into the sector.

**Rob Grace 1:33**

Sure, ya know, happy to do that. I feel like you know, over the past year, I've become a part of the GISF family, working on the GISF blog on the research that I've done on humanitarian notification systems. So, check it out. Everybody listening, if you want to, and have Yeah, engaged in some other ways as well. But I think our organization is great. So I sort the work that you've done. But I'll tell you a little bit about myself. Here's a curveball in terms of how I got to where I am. Why it is that I do. This is my second career. I had a first career doing something completely different. I did theater, I was a playwright, oh, which is why I know all these tongue twisters for everyone listening, we were doing some before we started the recording. But this is sort of in undergrad I majored in drama, and then moved to New York, was doing theater reading plays, and basically found it to be a means by which I, as a curious and confused observer, tried to understand humanity, and explored that issue as it related to that broad theme through playwriting, but got to a point where I felt like I was some part of my brain felt like it needed some kind of additional intellectual stimulation. And I started writing plays that required a lot of research. And then I started selecting projects based on the research that the project would require me to do, because I wanted to do the research. And then I basically realized, I could just do the research without having to read at the play. So then I realized that actually, my brain was telling me that I wanted to shift careers. And I felt very much on to international relations, I felt very much drawn to trying to comprehend why it is that large scale atrocities repeatedly occur and that humankind is unable to prevent wars and all of the horrors of war from occurring. And that sort of broad impetus brought me to where I am today, where I'm researching different aspects of humanitarian organizations and trying to understand the policy issues that humanitarian organizations confront, and trying to produce research that hopefully constructure people's thinking about how to approach various challenges and dilemmas.

**Tara Arthur 4:08**

That is an incredible introduction, and the wonderful little learn all those new things that I've just learned about you really interesting background in the way that that's informed where you've come to now talking about humanitarian notification systems. And maybe we just go there a little bit and tell me a little bit more. What is humanitarian notification systems?

**Rob Grace 4:32**

Who even this question, what are they? It's hard to answer? Everything about humanitarian notification systems is complex and difficult to talk about. So what are they? First of all, let me start by addressing the issue of the nomenclature of what we call these things because we're calling them humanitarian notification systems. But not everyone uses that terminology to describe what they are. Some people call them humanitarian notification systems. or deconfliction, or H and S for D, they used to be called humanitarian deconfliction. But there was a pushback against that terminology because deconfliction is a military term used by militaries. And it was deemed inappropriate for humanitarians to say that they were engaging in deconfliction. That's something that that militaries do. But essentially, now, we will, for the purposes of this conversation, I will be referring to it as humanitarian notification systems, which are essentially, mechanisms by which humanitarian organizations share geographic coordinates, with parties to armed conflict of humanitarian locations and activities. So there are two types of notifications, fixed sites, say a warehouse, that office building and also movements. So if humanitarians are planning a convoy, they will notify about that convoy. The idea behind it, the reason for sharing these coordinates is to mitigate humanitarian insecurity, at least at a minimum, that's what the purpose is intended to be. Even the question of the purpose opens up Pandora's box of issues. But the idea is that you send your coordinates to say, a military, the idea being that then the military knows that you're going to be at this place at this time, and they can take that into consideration in their targeting practices, the ideal result being that less humanitarian organizations are accidentally struck or impacted by military activity for humanitarian organizations operating in volatile environments, such as armed conflict settings. That's the gist of what they are.

**Tara Arthur 6:43**

that, just that is very interesting. Let's unpack it a little bit further, I'd be interested to know, you know, when you say that you submit this information into the military is received the information? How is the data managed? And are there critiques of this system?

**Rob Grace 7:03**

Indeed, there are critiques of this system. And this is where I come in as, as a researcher trying to understand these critiques and trying to understand the way that these systems operate, or sometimes fail to operate as adequately as people would like them to. But the question of what exactly the platform is, what form does it assume, varies a lot from context to context. So, one end of the spectrum is a completely non digital approach. So you have a paper map, you have points on that map that show where say humanitarian warehouses are and you are sharing that map with, with the military that has been done and in some settings, and that sort of is perhaps one end of the spectrum to the sort of low tech version of it, which can be appropriate, if you're in a context where there are a limited number of fixed sites that are not going to change very much can be appropriate for that type of setting at the other end of the spectrum, is a more intricate technical platform, where it's a situation like Yemen, where you've had 1000s and 1000s of notifications of fixed sites, and movements that is constantly being updated as the situation changes. And you have a multilateral platform where you have many different humanitarian organizations, submitting notifications being run through an intermediary. In many cases, it's OCHA, and then OCHA then submits to the military. So, it creates in a situation like that, when it's scaled up, it creates a lot of challenges for data management, and process management. For example, a key question is: How accurate is actually the data that is being sent? Especially if you’re just typing in Geo coordinates? Very likely, they're going to miss type a little bit. So, there's that technical question of how accurate the data is, who is responsible for determining the accuracy of that data? is the whole purpose of humanitarian notification systems sort of fall short? If you're actually not sending accurate data to the conflict to the conflict party, but also there's the question of what does that military that you're sending it to actually do with that data? Ideally, they would do.

**Tara Arthur 9:35**

So, what do they do tell us?

**Rob Grace 9:37**

Well, to be honest, I can't tell you because it's a black box. And there actually is limited information about what happens once it is transferred over to the to the military, and certainly varies from military to military. But the ideal case is that the military receives it and they distribute it internally to the relevant stakeholders on the military side so that it can influence. The targeting process and other aspects of military planning. Sometimes that is certainly not the case. Sometimes it is certainly not integrated in that way by militaries. There is also the concern that it could be used for the exact opposite reason that it is intended to be sent over the intended military will use it so that they do not accidentally hit humanitarians. But there can be a concern depending on which military you're sending it to. Other than that, a military could conceivably use it as like a suggested targeted lists like Oh, great. Now we know where humanitarians are. If we want to hit humanitarians, now we know where to hit them set has been a concern in Syria. That's one context where that concern has arisen. But I perceive this is what I hear from humanitarian workers themselves who have reported this to me in research interviews I have conducted that one should not push that concern too far. The more widespread perception from humanitarians that I hear is their militaries, they don't need this information for their targeting, if they are intending to target humanitarians. They do not need humanitarians to send that information they already have other means to get that information. But that is another concern. So, the concerns about HNS basically run the gamut from the, you know, nitty gritty of the technical How are you actually inputting the data? How does the interface work? Is it user friendly? Does it maximize the possibility that the user will be able to input accurate data to the whole process of who manages that data? And ultimately, how is that data used? Basically, every step of the process is something that is worthy of policy, attention and discussion and discourse.

**Tara Arthur 11:53**

And speaking of that, you know, let's maybe talk a little bit further about the wider discourse on HNS or humanitarian notification system. So how would you say that kind of relates in more detail around some of the philosophical debates around, you know, humanitarian law and principles and whose responsibility it is to manage these types of systems? Do you have any reflections on kind of the wider debates and where this kind of fits into the bigger humanitarian conversation?

**Rob Grace 12:27**

The topic of HNS fits exactly within all of those hot rod issues that you just alluded to. It's a technical platform of information sharing, great need some attention in terms of how the technical platform is set up. You know, like I said, how user friendly is it? How was how was the process manage, but it also points directly toward this question of whose responsibility should it be to gather this information? It is certainly not least under IHL, the humanitarian’s responsibility, it's the parties to armed conflict, it's their responsibility to apply the principles of distinction and proportionality and other principles of IHL into their targeting practices. It's their, their responsibility, the military's responsibility to apply those principles and their responsibility to understand the civilian environment to do so. So, there is a possible criticism and concern, about HNS that it's the military outsourcing that responsibility to humanitarians. So, it gets to that philosophical debate that comes up in the discourse and the literature on humanitarian negotiation, or humanitarian military relations. The overarching concern of humanitarians being instrumentalized in their efforts by militaries and governments in ways that serve the interests of militaries and governments in ways that are not consistent with humanitarian, and it cuts to the heart of that concern and that possible dilemma, Zama being that humanitarians must engage with militaries in some way it's necessary for access. It's necessary for mitigating humanitarian insecurity. But in doing so, in those interactions, are they enabling humanitarian work? Or are they enabling governments and militaries to in some way, wage war in a way that makes it seem legitimate without necessarily being consistent with the aims of humanitarianism? This is a debate that stretches all the way back to the beginning to 1859. So, listeners out there with their bingo cards, I am about to reference the Battle of Solferino. But this was the same debate that was happening in the mid 19th century when Andre do not, and others, proposed and created the International Red Cross movement that later became the International Red Cross and Red Crescent Movement, the idea being that there should be civility and auxiliary societies on the battlefield to attend to the medical needs of wounded soldiers. But there was a pushback against that. Others saying you should not do this, this will make war fighting easier for governments and militaries, you're being instrumentalized. By them, it's their responsibility to attend to the medical needs of their wounded soldiers, you should not be creating civilian organizations to do this. In a sense, HNS speaks to that same overarching concern. What is humanitarian? Some? Whose responsibility should all of this be? And how does that all play out in how it's implemented?

**Tara Arthur 16:02**

Wow. So that is quite a bit to unpack. And just from your reflections in doing this work? What do you think organizations need to be most mindful of considering all of that? And in certain climates, we know that these issues are ever growing in their dynamics, but what are some of your general reflections on what organizations really need to prioritize? With this in mind?

**Rob Grace 16:31**

Let me start by saying it's actually hard to answer this question without having some solid metrics on how HNS has functioned how effectively it has function. So, this is another overarching issue is the lack of the lack of metrics? We do not know, as I said before, what militaries do with this data, we do not have metrics on how accurate the data is. The intermediary that receives the data from humanitarian organizations, and then transmits it to the military sometimes has engaged in some completely minimal as far as I can tell verification of the data before sending it forward. But that verification is essentially checking to make sure it's in the right country, or checking to make sure that it's not in the middle of the ocean. practitioners that I have interviewed have said that there have been cases where they're double checking just to make sure it's not the middle of the ocean, and they see that this coordinate is in the middle of the ocean. Clearly the wrong coordinate that has been sent over that making sure that it's in the right country, or not in the middle of the ocean is not the same as verifying that actually the coordinate is the accurate coordinate. So, without metrics on those issues of how accurate the data is, on, actually what is the impact of sending over the data, it's actually hard to engage in in empirically grounded discussion about what humanitarian organizations should and should not adjust, about how they engage in humanitarian notification systems. But that being said, humanitarian organizations must when they're considering whether to participate in a system like this must consider how that military is likely to use this information. Certainly, it doesn't make sense to use it with a military that you do not perceive to be acting in good faith in their participation in the system. That being said, referring back to the context of Syria. This is a context where faith was completely lost in the system, because sites that were notified through the HNS were repeatedly bombed, there was not a sense among humanitarian organizations participating in the system, that it had a protective effect on organizations, many organizations continued to participate in the system, because they perceived that it could be useful in the long term for accountability purposes. They wanted a record of the fact that they had sent this data to parties to the conflict and that he cites had been struck afterward. But that opened up a huge debate, because the system was not intended to be a system for accountability was intended to be a system for mitigating humanitarian insecurity. So, you have this disagreement debate that is highly charged. About what I actually should be the purpose of it. So, when considering whether to engage in humanitarian notification systems, at a bare minimum, also, it's important to have a realistic sense of what this system can accomplish, and the limits of what it can accomplish, and that should feed into this decision-making process. But it should be voluntary, and it should be something that that organizations decide on, on a case-by-case basis, if they perceive that it will bolster their security, then it conceivably could make sense to participate in the system. If not, then it does not make sense to participate in the system.

**Tara Arthur 20:40**

That's very interesting. And just thinking about the use of the system in the multiple ways you just outlined, it's absolutely very fascinating how, you know, depending on the organization's positionality, how they might view that, and I'm just thinking, how's your research, you know, also looked at the gaps between humanitarian notification and civil military relations and, you know, thinking of some of the examples you've just highlighted, do you feel that there's some kind of new way of exploring that relationship through your research

**Rob Grace 21:16**

For sure. This is how I came across researching humanitarian notification systems in the first place. I stumbled across it completely by accident. In the past when I was researching humanitarian negotiation, and humanitarian civil military coordination, it was in interviews, as I was conducting previously for different research project where the issue of HNS came up and all the challenges and dilemmas came up. But I'll link it to humanitarian negotiation specifically, which is an element of humanitarian, so military coordination, or sim court. You're talking about negotiations between humanitarians and militaries. But essentially, these systems are negotiated the terms of the systems are negotiated between humanitarians and, and militaries, you need to make sure that the military buys into the system in order for it to work. And the information needs to be transferred in a way that will work for the military to receive. What interviewees have expressed to me is the importance of not relying on HNS as a platform to replace that engagement that is necessary between humanitarians and militaries, but rather to complement those engagements, especially if something goes wrong. If you submit a notification, say on a fixed site, and then that fixed site is struck by the military, it is important to have some kind of process for engaging with the military to find out what happened sometimes requires negotiation and advocacy to make sure that whatever happened does not happen again. So, it's important to have a complementary channel of communication that complements the technical process of submitting Geo coordinates through the system. But that's a matter of a broader engagement, a matter of humanitarian negotiation, and a matter of humanitarian and military relations. So, HNS sort of sits within that broader engagement and that broader dialogue as one tool, among many others, to facilitate and enable humanitarian work.

**Tara Arthur 23:39**

That's very interesting. Thanks for unpacking that further. I'm thinking now that this feels like Wow, there's so much going on there. Take us into the future. Maybe tell me, what could this look like? Could there be some improvements to improve this through the research that you're doing? Are you seeing signs that there's opportunities in the way we're looking at in return notification systems? So, you know, I don't know if you wanted to maybe take us a little forward and where things may be going from that very interesting groundwork that you've just kind of laid out for us?

**Rob Grace 24:22**

Sure. I see three possible futures ahead of us for HNS. One possible future is HNS goes away. Many people are skeptical about HNS. They're skeptical about whether it has a protective effect at all. It requires a lot of resources from humanitarians to submit data, at least in its current incarnation. There are many contexts where humanitarians have lost faith in it have withdrawn from humanitarian notification systems, you know, stop participating in it. It's conceivable that if the humanitarian community might decide, okay, let's just stop using HNS altogether as one possible future. I see that as unlikely because at the same time where there is frustration with past and current systems, there still is a great deal of optimism about the protective effect that HNS can have. And in volatile settings, there is a sense among many humanitarians, that it has a protective effect that people feel safer on a convoy, if they know that there has been a notification sent about that convoy. Certainly, context specific, but there are some contexts where that is the case. So, a second possible future is HNS continues. But within the current paradigm, with some incremental improvements to the current paradigm, the current paradigm where humanitarian organizations submit through an intermediary that then submits to the military, it's a generally low-tech system that is important to highlight is this role of the intermediary, that humanitarians and transferring data to the intermediary have lost control of the data that they sent over. And then sometimes, in some contexts, have not even known what happens to the data. They have lacked transparency about what data the intermediary has actually sent to the military. So, there's this question of, okay, if you feel that your organization will benefit from participating in the system, it's a trade-off between participating the system and essentially losing control losing access over the data. So ,there are ways that the process can be reformed to ensure that humanitarian organizations can somehow maintain access to the data or maintain transparency about what happens to the data. And there can be some tech improvements, a more user-friendly interface, perhaps to minimize data inaccuracies. But generally keeping to this current paradigm is as the way it functions. That's the second possible future, I see. The third possible future is paradigm shift. Perhaps there's a completely different way to look at this and a completely different way to run these systems. So, here's where I get to the broader project at MIT, which is where I have done this research. The team at Lincoln Laboratory at MIT has created a prototype for HNS which is a different way for it can how it can run. And essentially, it's flexible and adaptable. So, it can be adapted to different contexts to different militaries that need different things to different humanitarian organizations that want to use it in different ways. But the prototype essentially ensures that the humanitarian organization, the user does not lose access to the data. It ensures that the data is once it's submitted, not subject to corruption. It's immutable system runs on blockchain, there's high level of data security involved, and essentially can function this prototype as sort of like a global emergency communication network that as long as there's a military hooked into the system, and then if humanitarian hooked into the system, and as long as they have both agreed that they want to use the system to communicate, they can use the system to communicate, there's a user friendly interface, where users can very easily submit accurate data not by typing in Geo coordinates alone. But it has a visual map interface where you have imagery that is presenting up to date, math imagery, of what you know what it looks like, on the ground, and you just draw on with your finger on the map, what you want to notify about, and then you send it over. But this could it's a prototype to inspire thinking about a different way that it could operate. Perhaps there's some other way that it could be reimagined, but in some way, in the future, there could potentially be some kind of paradigm shift where if humanitarians and militaries decide that they value this system, and they really want to make it work, and they work to ensure that the data is accurate, and that it gets from A to B, that there's some way to reimagine these systems in a way that would be tantamount to a paradigm shift. Wow.

**Tara Arthur 29:44**

Let's take a moment. You just shared something very significant in your trajectory of your research, it sounds like and that you've identified some of the very challenges that have been a part of HNS. And you've in fact been working on some of the, shall we say solutions to those challenges in developing this prototype? Where are you in the trajectory of the prototypes development adoption and use to know if some of these solutions or opportunities to kind of speak to some of the concerns that HNS has? Where's that? Taking you now?

**Rob Grace 30:30**

The prototype is developed is ready to be field tested. So, congratulations. Thank you. Yes, that's the next phase is to is to run it through a test and see, see how it does get some feedback about ways to tweak it to improve it. But that's where it is, right now. It's been built, and it's ready to be rolled out in a in a field test environment.

**Tara Arthur 30:57**

Maybe we can have you back after it's been tested to let us know how it's been going. And I don't know if you've already, either. You mentioned this, but don't know if you've already been thinking about other use cases for this type of technology that you're developing. And in your allusion to it. You know, typically when you're referencing HNS and conflict settings, are there other applicable uses that you are already kind of envisioning for something like this?

**Rob Grace 31:24**

Yes. So, the prototype that MIT has created is, you know, it's adaptable. So, the way it's built, it's designed to be used for HNS for communications between humanitarians and militaries, but could easily be adapted for other purposes. One possibility we have in mind is, in some way for humanitarians to use the prototype to communicate with each other across organizational lines. So, the system could be used conceivably to communicate among humanitarian organizations about access incidents that they want to share with each other, could be used to communicate with one another about locations of land mines, or some purpose like that. So, it could have other uses as well and could easily be adapted toward for those ends beyond HNS.

**Tara Arthur 32:16**

That's really interesting. And be very good to hear once you've had a chance to test and roll that out a bit more. I'm sure many people will be interested to follow that, is there an opportunity that that our listeners could follow that work already?

**Rob Grace 32:33**

If people are interested to learn more, they should absolutely reach out to me, happy to tell you more, we'll also be having a report coming out that will present some of our findings from our research. So that'll be coming out soon.

**Tara Arthur 32:47**

Wonderful. That's great. Well, before we let you go, I don't know if there's any other things that you would be willing to share or maybe synthesize for us that are really essential for us to walk away with on humanitarian notification systems, some considerations that, you know, organizations really need to think about in terms of good practices in the safety and security of, of how this kind of may work for their organizations or not in the decision-making process.

**Rob Grace 33:18**

Let me flag this issue, which is a big one important to highlight, which is that HNS is a system of data governance. And it's important to lean into that aspect of what HNS is, there is a whole field of humanitarian policy studies of researchers, scholars who are focused on these issues of digital ethics, and what it means to implement a system for storing and sharing data in an ethical and responsible way. The discourse on HNS. As far as I have seen, has not been linked in a very robust way to that line of policy thinking analysis. And I think that's extremely important that these are systems that are intended to be created to save lives, they might have certain unintended adverse effects. There are questions about who participates in the system, who should not participate? These are questions that have not been approached in a very transparent manner. What organizations get in what organizations do not get in is a crucial question, what are the obligations of managing that data? What possible harms can result are questions that require a great deal of critical reflection. So, one thing I would like to see in the future for or HNS is for these two subfields of humanitarian policy thinking to be integrated in a very, very deep way. So that questions about digital ethics are living at the heart of HNS and how we think about it and how we implement it.

**Tara Arthur 35:17**

That is very well said. Thank you so much, Rob grace, it has been wonderful to have you here. And giving us more insight into what humanitarian implications are and the future possibilities that we might see sooner, very soon. And we look forward to maybe having you back soon. And we do encourage people to take a look at the blog that you've written. And we'll post the link to that as well in the notes, and hope people will get to read more on some of the vexing questions you pose within the blog and some of the other really important notes that you referenced there. But really, we thank you for being with us and enlightening us with some new insights.

**Rob Grace 36:03**

The pleasure is all mine. Thanks for having me.

**Tara Arthur 36:07**

The global inter agency Security Forum is a member led NGO with a global network of over 140 member organizations and affiliates. We are committed to achieving sustainable access for populations in need, through improved safety and security for aid workers and operations. GSFC original research, collaboration and events drive positive change in security risk management across the humanitarian and development sector. We operate according to humanitarian principles and lead on best practices and innovation by pushing for a collaborative and inclusive approach to security risk management.