HUMANITARIAN LAW & POLICY

Conceive, standardize, integrate: the past, present, and future of adopting distinctive emblems and signs under IHL

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When the very first Geneva Convention was adopted in 1864, it was the culmination of several interwoven humanitarian projects of the ICRC's principal founder, Henry Dunant. One of those ambitions was the conception, standardization, and integration into what would become known as international humanitarian law (IHL) of the distinctive emblem of the Convention.

Designed to signal the specific protections IHL accords to the medical services and certain humanitarian operations, the emblem – today the red cross, red crescent, and red crystal – is displayed on different persons and objects in the physical world, including on buildings, transports, units, equipment, and personnel that are accorded these protections. Over its 160-year history, the distinctive emblem has saved countless lives.

Today, the ICRC is again engaged in a project to conceive, standardize, and integrate into IHL a means to identify those very same specific protections, but in a way the drafters of the original 1864 Geneva Convention could not have imagined: a digital emblem specifically designed to identify the digital assets of the medical services and certain humanitarian operations. In this post, building on previous work on this topic, ICRC Legal Adviser Samit D'Cunha summarizes some of the key milestones of the history and development of the distinctive emblem and explores how these milestones serve as a lodestone – or compass – for the Digital Emblem Project's path forward.

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The two years preceding the adoption of the 1864 Geneva Convention were truly remarkable with respect to the scale and speed at which an idea – a dream, really – became reality. In 1862, Henry Dunant published *Un Souvenir de Solferino (A Memory of Solferino)*, a devastating firsthand account of the carnage he witnessed on the battlefield, as evidence for a need for greater protection for wounded and sick soldiers, and the establishment of relief societies (precursors of the National Societies of the *Red Cross and Red Crescent Movement*) that could provide medical and humanitarian assistance. Dunant felt that there had to be a way of ensuring, as far as possible, that the heat of battle would not negatively impact the work of the medical services; therefore, the need for them to be legally protected and visibly identifiable became clear.

By 1863, it had been agreed by the very first meeting of the *Comité international de secours aux blessés* ("International Committee for the Relief of Wounded Combatants") – *which later become known as the ICRC* – that a distinctive mark would need to be universally adopted in order to identify and help protect the wounded and the sick, and those who provided them assistance. That same year, at the very first International Conference of the Red Cross and Red Crescent, a white background bearing a red cross was adopted as this distinctive mark. Aside from being a *compliment to Switzerland* (by inversing its flag), part of the reason a simple design was chosen was because, given its protective function and use in warfare, it had to be possible to *rapidly reproduce it with the means available*.

Today, an increasingly digitalized and connected world has provided new opportunities in the social, economic, developmental, humanitarian, information, and communication spheres. The internet can help improve and save lives, including during situations of armed conflict. Correspondingly, as a realm of economic and strategic importance, it is no secret that parties to armed conflicts have increasingly turned to cyber operations as a means of harming their adversaries. *Cyber operations during armed conflict* also risk negatively affecting civilian populations. Of particular concern is how such operations harm both the medical services and humanitarian operations. Indeed, notwithstanding how essential cyberspace has become for this life-saving work, today there is no signal or emblem to identify in cyberspace the specific protections IHL accords to the medical services and certain humanitarian operations. As a result, there is the need to once again ensure that, as far as possible, the heat of battle does not affect the work of the medical services nor certain humanitarian operations; this time in the form of a digital emblem signaling the protection of medical and certain humanitarian digital assets from cyber activities during armed conflict.

Together with research partners, the ICRC is refining a technical solution for the digital emblem that it hopes to present to states and the Movement. After the *careful consideration of different technical proposals*, the ICRC focused its work on the *Authentic Digital Emblem (ADEM)*, a *technical solution* that best meets the operational and legal requirements for the project. The ICRC identified ADEM through nearly four years of consultations with states, the Red Cross and Red Crescent Movement, and experts.

Standardization

Surprisingly, before 1863, different symbols existed to identify the medical services of the armed forces – including white flags or white armbands, the *Caduceus symbol*, or other national symbols. However, these symbols were not well known, were rarely respected, their use was not regulated, and they were not signaling any specific legal protection. In that sense, the creation of the distinctive red cross on a white background and its adoption into international law was also a means of *standardizing* an existing practice which would become universally recognized and accepted. All states were willing to *accept and recognize* the red cross, and over time, the red crescent, red lion and sun, and red crystal were similarly recognized as distinctive emblems. Today, however, in a remarkable testament to the work of both states and the Movement, the distinctive emblems of the Geneva Conventions are used and recognized in every country in the world.

In developing the digital emblem, *standardizing* is crucial; the ICRC is actively engaging with organizations including the *Internet Engineering Task Force (IETF)* in this respect. Owing to the nature of the internet, standardization remains a key element for the deployment of the digital emblem.

The internet – literally the *inter*connection of thousands of autonomous *net*works comprising billions of computers and other hardware across the entire globe – connects devices that run on different software and don't necessarily communicate the same way. This issue is resolved with standardized protocols – that is, *a way of doing certain actions and formatting data so that two or more devices are able to communicate with and understand each other*.

Unlike the physical world, the internet presupposes that things that communicate with one another must understand each other – and standardization is therefore a critical element for the project. Thankfully, the ICRC is able to draw, and rely on, a vast number of use cases in the physical world that can be understood by analogy in cyberspace, as well as the expertise of a growing number of tech industry actors to help carve a path forward for standardization.

Integration

Once the Red Cross was standardized, it was understood that the solution *itself* must also be integrated into IHL. This was indeed achieved for the first time in 1864 and later in the 1949 *Geneva Conventions and their Additional Protocols*. Not only did the integration of the distinctive emblem into these treaties give the emblem its most important function, which is the signaling of legal protection, but it also regulated its use by parties to armed conflicts, prohibited its misuse, ensured specific rules on the emblem were integrated into domestic law, and obliged states to disseminate IHL more broadly, including rules related to the emblem. Without this integration, the distinctive emblem would not be an effective tool.

To illustrate this point, imagine a country with busy crossroads; each intersection is equipped with stop signs. Then, imagine that there are no laws regulating whether or not a driver needs to stop when they see a stop sign. Imagine, also, that there are no laws preventing anyone from placing stop signs anywhere they like. The country also decided not to inform new drivers about stop signs and does not mention stop signs in any traffic safety manuals. Stop signs would quickly lose their meaning and chaos would ensue. However, reality is different: That the very image of a red

octagon elicits, globally, in most drivers' minds an impulse to *stop* their vehicle indicates that in very few countries are any of these hypotheticals true today, and by extension it demonstrates the value of standardization in this regard.

Similarly, the digital emblem will need to be incorporated into IHL if it is to be effective. There are several different mechanisms to do this, which the ICRC has identified in its *previous publications on this topic*. One possibility is the amendment of *Annex I of the 1977 First Additional Protocol*; another is a new Protocol additional to the Geneva Conventions, similar to the approach taken in 2005 to establish the red crystal emblem. In both cases, the digital emblem would thereafter need to be incorporated in domestic law and enforced by national authorities, as the distinctive emblem is today. While *conception* and *standardization* are still ongoing, the ICRC has begun meeting with states to identify the best way forward, recognizing that such discussions play a complementary role in the digital emblem's development.

Conclusion

On the cutting-edge of both law and technology, the use of cyberspace during armed conflict continues to be a hotly contested issue with several unanswered questions. However, there are things self-evident enough for everyone to agree on. Cyber operations must not be used to harm the wounded and the sick. They must not be used to destroy or encrypt patient data or render medical equipment useless. They must not be used to unduly interfere with humanitarian operations.

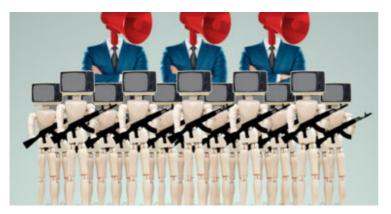
The Digital Emblem Project is – no pun intended – emblematic of that broad consensus; the project represents an opportunity for actors with vastly different mandates and objectives – states, the Red Cross and Red Crescent Movement, technology companies, and others – to work together towards these self-evident and manifestly good goals. To paraphrase Henry Dunant in *A Memory of Solferino*, in an age when we hear so much of progress and civilization, is it not a matter of urgency to press forward the attempt to prevent, or at least alleviate, some of the horrors of war, this time, through a much-needed technical development for the good of humankind?

See also:

- Tilman Rodenhäuser, Mauro Vignati, **Towards a 'digital emblem'? Five questions on law, tech, and policy**, November 3, 2022
- Felix E. Linker, David Basin, Signaling legal protection during cyber warfare: an authenticated digital emblem, September 21, 2021
- Tilman Rodenhäuser, Laurent Gisel, Larry Maybee, Hollie Johnston, Fabrice Lauper, **Signaling legal protection in a** digitalizing world: a new era for the distinctive emblems?, September 16, 2021

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