IETF-120
Digital Emblems

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The Problem

- How to **prevent loss of lives in disaster & conflict areas** around the globe that may occur by lack of information?
- Limited situational awareness caused by **lack of information** in conflict and disasters areas **causes civilian harm**
- E.g. recommended measures of the **UN Secretary-General** to protect medical entities, following SCR2286:
  - *"Recording and mapping the presence of (…) hospitals and other medical facilities (…) through enhanced information exchanges and real-time coordination with medical and humanitarian actors on the ground (…)*

Photo by Ukrainian Government / DSNS

DANGER
MINES!
MINES
UXO
Photo by Dmitry Shamis / Unsplash

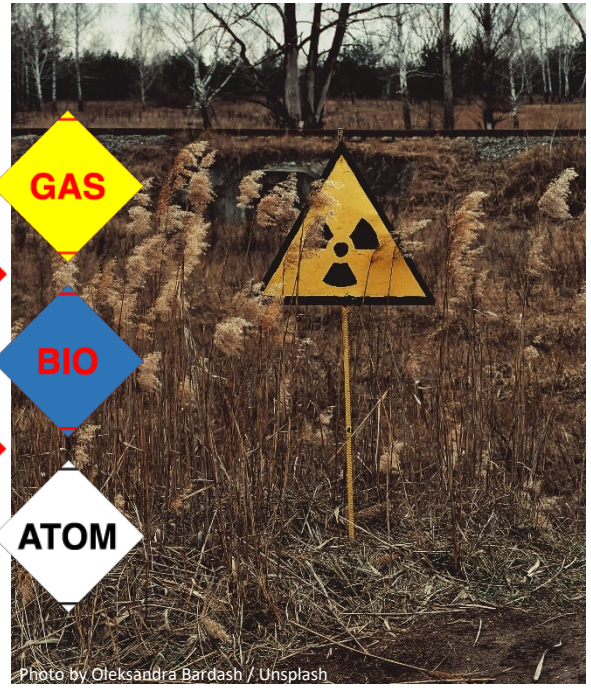
GAS
BIO
ATOM
Photo by Oleksandra Bardash / Unsplash

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Photo by Ahmed Akacha/ Pexels

Current Situation: Physical Signs

- Parties in conflict can **currently** only use **a limited number of physical signs** for (near) real-time deconfliction
- Physical signs:
  1. Cannot be selectively shared
  2. Cannot be authenticated
  3. Hard to see (bad weather, darkness, beyond visible range, …)
  4. Are hard to process by automated / autonomous systems
  5. Hard to proof to have existed, or to have not existed

Digital Signs / Signals / Emblems

Benefits

- Enhanced security
- Independent of object location
- Real-time dissemination to multiple stakeholders
- Supports many types of objects (physical, virtual) and events
- Can be processed by automated systems

Requirements / Challenges

- Establishing trust
- Binding to objects
- Interoperability
- Diversity of Use Cases