



# CRISIS▶RESPONSE

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JOURNAL

PROTECTION | PREVENTION | PREPAREDNESS | RESPONSE | RESILIENCE | RECOVERY

## EXTREME WEATHER 2017 HURRICANE SEASON

Interview with Jesper Holmer Lund of INSARAG; Geopolitics & Climate; Resilience in Qatar; Security & Conflict; Immersive Counter-terror Training; Reintegrating Violent Extremists; Business Continuity; Communities & Policing; Risk Communication; Leadership; Humanitarian Action; Junior Health Volunteers in Refugee Camps

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Peace One Day

**CRJ** aims to identify and highlight future trends that could manifest as life-threatening hazards and events which will, in turn, confront all those whose concern is to protect lives, livelihoods, the environment and businesses, and consequently the wellbeing and sustainability of nations and communities. We then propose practical solutions.



In many ways, it is a simple matter to isolate and trace the threads in this complex global tapestry of climate, geopolitics, politics, conflict and disputes, modern tribalism that is often fuelled by social media, food insecurity, human encroachment of land previously considered unsuitable for settlement – the list is long but the clues are all there.

This issue's narrative thread provides a timely reminder – if one were needed – that nature can be the biggest threat of all, with reports on the cataclysmic devastation caused by a particularly active hurricane season. And, as CRJ goes to press, wildfires in California have led to 23 deaths, hundreds more missing and thousands of structures destroyed.

On p30, Casey Brunelle traces links between climate, resource scarcity and conflict, before we move on to John Drake's analysis of stabilisation progress in the Middle East on p34. The long term and wider ramifications of protracted conflicts are examined on p36, and we consider the impact on communities and individuals on p38. As countries prepare themselves for the return of foreign fighters or their children (p44 and p46), we look at reintegration and peacebuilding, which are not only said to cost less in the long term, but also create the peaceful and sustainable societies in which we all want to live (p48 and p50).

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Page 72 presents developments for the treatment of traumatic brain injury, followed by articles looking on inter-service co-operation and how technology is being harnessed to create more secure and resilient communities.

This all serves to demonstrate that the whole picture, complex as it is, can be redrawn with positive outcomes. It is a challenge, but the will and human creativity are in place.

**Emily Hough**

# Creating a new, community-centered approach to Community Policing



## The Vision of Unity

- To capture **best practices** for cooperation between police and citizens
- To develop a **communications technology** to facilitate, strengthen and accelerate the communication between citizens and police
- To create an **architectural framework** to support the analysis, mapping, assessment and improvement of Community Policing models
- To design, develop and deliver **training** for police and **awareness raising** activities about Community Policing



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# Building safer societies: A framework for trust

Trust has to be earned. **Laurence Marzell** presents a scalable transferable architecture for community policing, which is helping to build a bedrock of trust between citizens, law enforcement and other stakeholders

**I**n today's complex and interconnected world, the diverse communities that exist within it are ecosystems no longer defined by geography alone. Instead, a multitude of factors, interests and connections – both virtual and physical – bind us all. These connections need to define the actions of collaborative multi-agency community policing (CP) approaches. Indeed, close, mutual and trusted collaboration between these agencies and organisations and the citizens and communities they serve, is an essential component in ensuring the fulfilment of their duty to protect and promote citizen and community wellbeing.

While CP manifests itself very differently to that of other forms of policing and law enforcement, it is information that connects them.

Information, its use and governance, enable valuable and meaningful CP that can help to build and sustain trust across and within citizens, communities and law enforcement. However, information flows are not fluid like water. Organisational boundaries and the many different rules and requirements that apply, mean that information is often restricted or prevented from being used by those

most relevant, or in a way that can do most good.

A contributory cause is that organisations view the world in which they operate very differently. Differing perspectives are driven by many factors including risk, history, culture, capability, economics and leadership. These factors fuel how organisations conduct their business, their governance and policies, training, budgets, processes and systems.

These differences, especially in governance and policy – where resulting information and decisions need to flow across organisational, operational or jurisdictional boundaries (internally and externally) – are significant areas of risk. Failures can, and often do occur, especially in our interconnected world where, in the wake of a major incident, dependencies and interdependencies can lead to consequences and cascading effects. The complexity of collaboration and communication with citizens and communities, essential in CP where a user and citizen-centred approach is key (ie a unified, coherent and cohesive view of roles, responsibilities and capabilities relative to information use), is critical to achieving desired CP outcomes.

Officers from Polizei Bayern (Bavarian Police) at work in their community. The Bavarian Police College is a partner in the Unity Project

Unity Project

This article describes a community policing architecture framework (CPAF) that provides a common and shared understanding of the governance, policy and flow of information, across and between the multiple stakeholder organisations involved. It includes not only citizens and law enforcement, but all stakeholders. This creates a mechanism to better understand and share information at a community level, and provide an essential building block to create and sustain trust and, ultimately, the means by which shared CP outcomes can be achieved.

CP across the UK, Europe and further afield, is the bedrock for keeping society and its communities and citizens safe, secure and resilient. Some of the most highlighted contemporary examples are the many terrorist attacks that communities across the world are having to plan for and come to terms with. Such events place a particular spotlight on the importance of CP in the fight against terrorism. This can be seen in the two examples below.

The formal introduction of 'community-oriented policing (COP)' as the official philosophy of policing in Belgium was part of drastic reform in 1998. COP is a strategy that focuses on the police building ties and working closely with members of communities. It seeks to create partnerships between law enforcement agencies and other organisations, such as government agencies, community members, non-profit service providers, private businesses, and the media, which represent a powerful channel through which the police can communicate with the public.

Community policing recognises that police cannot solve every public safety problem alone, so interactive partnerships are created in which the public assists the forces in developing problem solving solutions. All political parties, majority and opposition, as well as parliament and the government, pleaded for this police model. Finally, the adoption of COP was consolidated in a circular letter distributed by the Minister of Internal Affairs in 2003.

The second example is that of Officer Jim Buck of the Los Angeles Police Department (LAPD) in the US, who dresses like a cop but does not behave like one. As a community outreach officer, he uses community policing strategies to fight terrorism, as called for by the White House to prevent violent extremism. Under the leadership of Deputy Chief Michael Downing, community policing forms partnerships between law enforcement and the communities they serve. These techniques emphasise proactive joint problem solving to build trust and co-operation and address the conditions that diminish public safety. Nearly one half of policing agencies in the US are using the community policing practices of outreach and engagement to communities being targeted for recruitment to terrorism, according to a recent national study led by Duke University's David Schanzer.

But terrorism, like other issues and challenges facing society at the grassroots, can all be tackled proactively through good CP practices before they become more serious. Research on ethical, legal and societal aspects related to best practice in CP across Europe has been undertaken by the Unity project partners in order to shape the project's development.

Unity is an EU Horizon 2020 funded project that aims to enhance the relationships and communication channels between the police and communities. To this end, Unity aims to identify CP best practices, and use these to develop solutions to improve the communication between police and communities, as well

as a foundation for the development of police training and awareness around CP. Through further background research and interviews with existing stakeholders, this has evolved into three important CP concepts:

- Working together, co-operation and collaboration between police and external groups;
- Building relationships of trust, confidence and understanding between police and external groups; and
- Addressing local needs and issues, both proactively and reactively.

Primary research and requirements elicitation for the project were undertaken in eight partner countries: Belgium; Bulgaria; Croatia; Estonia; Finland; Germany; Macedonia; and the UK. Interviews were conducted with police, young minority people, intermediaries (who work with young minorities and the police), advocates and legal and academic experts. From this research, the project developed its work based on the identification of six pillars (outcomes) of CP (see sources), which are: Trust and confidence building; accountability; information sharing; crime prevention; addressing local needs; and working in a collaborative manner.

To achieve these shared outcomes across a range of multiple and diverse stakeholders and organisations – including citizens and community stakeholders – can be challenging because, as previously described, each views the world very differently. An organisation's perspective relative to the other organisations with which it must collaborate, is neither right nor wrong, good or bad. It is just different. And all these views have value. But the differences, especially at the interchange of organisational boundaries, whether internal or external, are where gaps exist and risks arise. Information and its flow between and across these different organisations and stakeholder groups, so critical in creating a shared understanding of the issues and challenges faced, need a framework to bridge these gaps and to build the trust that is essential to achieve the desired CP outcomes on the ground.

## Dynamic and complex challenges

Benjamin Disraeli once said: "The most successful people in life are generally those who have the best information." Still true today, this statement applies equally to communities seeking to understand and meet shared issues and challenges. Information, its flow and use across and between the many diverse stakeholders and organisations, provides the currency and lubrication to improve CP. It is this shared information and its use that show what works well and what does not in current CP practices at a community level; and how that information can be applied to innovate and improve new CP models and approaches to meet today's dynamic and complex challenges.

Unity CPAF is aligned to the outcomes identified in the project's research. It will use information as an enabler to underpin a shared view of risks, threats, vulnerabilities and hazards across community ecosystems. This scenario-driven view supports a governance framework that enables the many multiagency organisations involved to work more effectively together. Collaborating and co-creating innovative solutions with citizens and communities, through a better understanding, sharing and management of information, will mean they are able to address the challenges within the complex community ecosystem.

Enterprise architecture (EA) is defined as: "The

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fundamental organisation of a system, embodied in its components, their relationships to each other and the environment, and the principles governing its design and evolution.” The CPAF is built upon the core principles of EA to simplify and manage the inherent complexity of a multi-stakeholder and dynamic environment. Its ‘single source of truth’ drives agile and iterative testing, and governs rules and principles of CP, across multiple different partner organisations and stakeholders. It is an architecture to capture, unify and clarify governance and policy through to operational implementation, with a shared approach to improving CP through collective decision-making and approaches. This creates an environment in which trust can flourish and improved CP outcomes can be achieved.

## Granularity

The Unity project has captured, held and structured the detail required for the eight pilots within the CPAF. This includes what information is used, how it is used and the constraints of its use, across and between different organisations involved in CP at the community level. This creates a current operating model of CP, from which scenarios are used to build a set of detailed process flows within the architecture framework, to visualise the activities that take place. It will help understanding, at increasing levels of granularity, of how joint decision-making in the context of CP occurs, the processes, procedures and systems that support it, the governance and policy that enables it and the information sources, needs and uses that help or hinder collaboration.

The result is a target operating model; in other words, the desired and agreed vision that the stakeholders have of how they would like to see their CP activities improved. This captures and maps both the subjective and objective inputs of end-users on what works and what does not work in their current operating

model of CP. From this analysis, innovation can be identified and applied across core capability areas of people, process, technology and governance.

The analysis between current and target operating models can drive requirements, described through detailed process flows, for onward exercising, testing and validation of improvements. This is incorporated into a business improvement and transformation plan to drive implementation or recommendations for changes to policy or governance.

As stated in the introduction, trust can only be earned. Information is the common denominator between the many different organisations and stakeholders involved in CP at a local community level. How such information is gathered, shared and used to benefit the community and tackle the numerous challenges at the grassroots level, before they become significant problems, is paramount. Trust needs to be earned between all citizens and their communities, as well as the various law enforcement and other multi-agency stakeholders involved in community policing on the ground.

This framework for trust, the CPAF, is a mechanism to understand and share information at a community level more effectively. It provides an essential building block to create and sustain trust and, ultimately, the means by which shared CP outcomes can be achieved. The findings and knowledge from the CPAF, captured and described in the target operating model and detailed in the business improvement and transformation plan, provide valuable reference knowledge and benefits that are scalable and transferable to support CP improvement outcomes, wherever community policing is required.

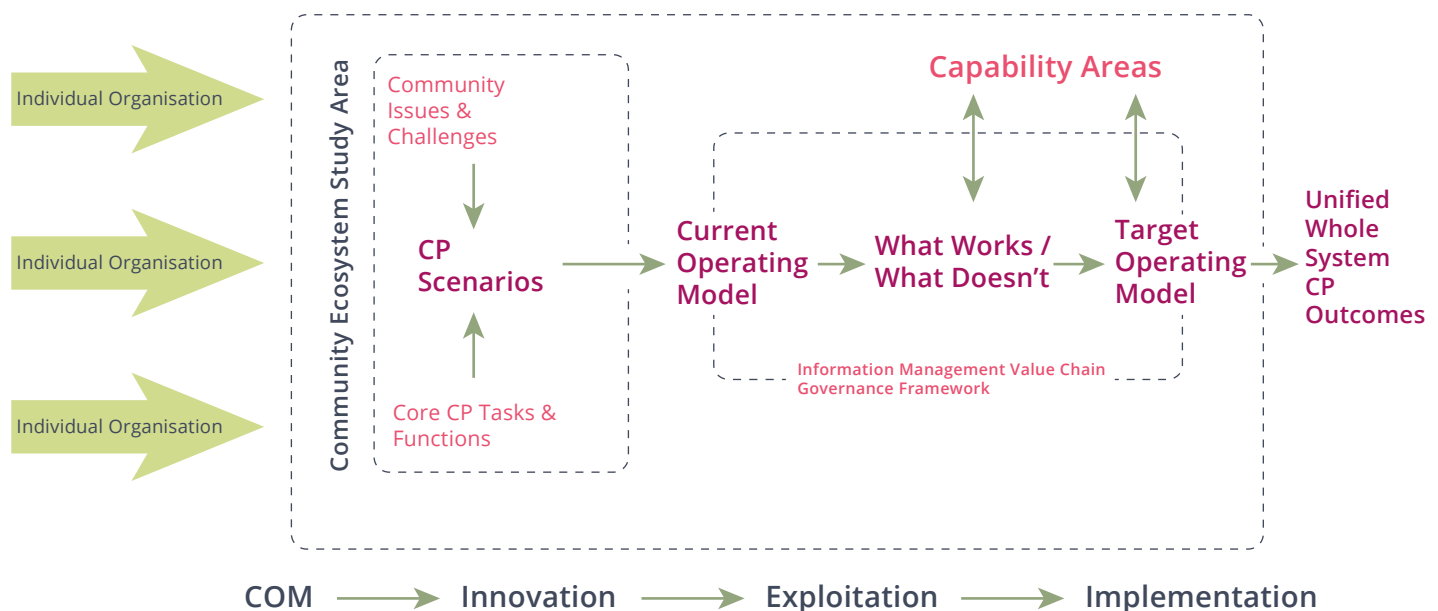
The framework that can provide a common and shared understanding of the governance, policy and flow of information, between the multiple stakeholder organisations involved, which is being developed in the Unity project, is an important step toward establishing vital trust. CRJ

## References

- (October 2016): Counterterrorism in Belgium: Key Challenges and Policy Options, Royal Institute for International Relations, *Egmont paper 89, October 2016, Ed Thomas Renard*;
- Dr Stevan Weine (February 2017): How Local Law Enforcement Uses Community Policing to Combat Terrorism, *www.lawfareblog.com*
- Akhgar, B, Bayerl, S, Markarian, G and Karlovic, R (2017): Concluding remarks on CP, in Community Policing, a European Perspective, Strategies, Best Practices and Guidelines, Springer Europe;
- ISO/IEC/IEEE: ISO/IEC/IEEE 42010: Systems and software engineering Architecture description 2011.

## A FRAMEWORK FOR TRUST – UNITY PROJECT BLUEPRINT

Community Policing Architecture Framework – Capturing / Unifying: Governance, People, Process & Technology





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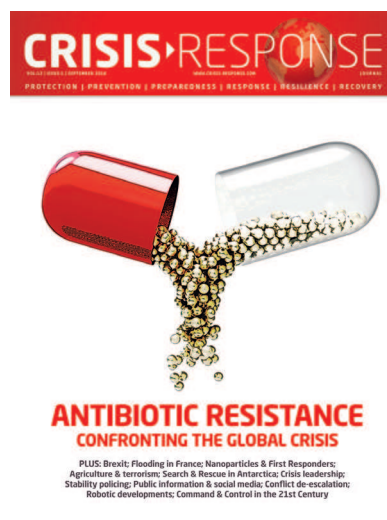
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