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# **CAN-AID:**

## *Communications, coordination and crisis response centre "in a box"*

**A Concept Proposal** 

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This concept proposal was presented in 2010 to the Canadian Association of Defence and Security Industries (CADSI) for consideration.

Although it specifically refers to CADSI and its members, this concept note is intended to build partnerships with other innovative partners and service providers interested in shaping the crisis response environment.

#### Aim

This concept proposal presents Can-Aid, a *Communications, Coordination and Crisis Response Centre in a Box* for the humanitarian and emergency response sector designed to address the critical response period (72 hrs) following an event or intervention.

This concept proposal is designed to test how CADSI SMEs can coordinate efforts and business interests in support of emergency crisis/conflict response.

It is intended that the components for this product are produced by the CADSI member companies. Can-Aid somewhat duplicates the success of <u>www.shelterbox.org</u> (refer to Appendix A), but is distinct in its functionality and intended end-user. This project has the potential to save lives, reduce suffering and support emergency responders with the tools required in the growing marketplace of field practice.

For purposes of this proposal, "humanitarian and emergency response sector" refers to the following group of stakeholders working in field operations in support of humanitarianism, peace and security:

- First responders (medical, police, fire)
- NGOs that make up the humanitarian and development sectors
- Emergency relief/response sectors
- Civilian aid agencies
- Private security companies

#### Context

Currently, non-governmental organizations (NGO) have no interoperable communication standards or supporting technologies for a cohesive co-coordinated approach to crisis management, peace operations, and disaster mitigation. Other stakeholders in the security and defence sectors do have such standards. A major challenge for emerging missions using the comprehensive approach to operations is that NGO's are often unable or unwilling to integrate into security and defence structures, such as military, gendarmerie and police. Cited as the primary reason for non-integration, humanitarians have observed militaries gathering data from civilian sources to inform the 'military intelligence' cycle, and using it against civilian populations in a host nation. This process has affected the willingness of NGO's to actively share their field information and share communications systems on such missions for fear of having the information used for military gain.

Most western militaries use data to inform their *Effects Based Approach to Operations* (EBAO), which is a warfare framework that identifies 'targets' and 'centres of gravity' important to winning military campaigns. This framework has not yet been successfully converted to peace and stability applications, of which the NGO community may be interested. NGO and humanitarian organizations may eventually require communication technologies that use data to inform EBAO's for disaster response, post-conflict reconstruction and peacebuilding. On the near horizon is a need for a system designed to suit their unique principle-based independent organizational culture.

#### The Problem

Currently, there is a shortage of support for the sectors working in humanitarianism, peace and security that fall outside of the traditional security and defence sectors. For example, unlike their military/defence counterparts, civilian humanitarian organizations and other similar stakeholders experience:

- A lack of coordination among stakeholders working in the field towards similar objectives;
- A lack of communication and logistical support among the same set of stakeholders;
- Little or no training or simulation available; or the funds to support regular training/simulation of field situations.

There is an immediate need for financial and equipment support that is of a similar sophistication and robustness of that used within the defence and security sectors.

Most importantly, the NGO and Humanitarian communities will need to catch up to the current NATO and Military comprehensive approach initiatives which have been developed over many decades with billions of dollars (and Euros) in funding.

They do not have standard communications hardware, software, or "standard interface dashboards." Every complex system of instruments requires a human interface dashboard. Airplanes, cars, and robotics all have standard interface dashboards designed to support usability, comprehensiveness, integration, and safety. The computer interface is the desktop and it is designed and customizable to various computer requirements. There is currently no standard interface dashboard for NGO's and Humanitarians working in crisis management and emergency environments. Any professional network engineer familiar with "emergency systems design" will point out the absolute requirement for *standard* communications hardware and software for safe and effective crisis management and response.<sup>1</sup>

The NGO and Humanitarian communities are in the situation of not having the financial resources available to purchase or subscribe to any technology requirements that support a cohesive approach to operations; nor a representative organization that supports them through the sharing of information between and among stakeholders within the industry.

<sup>&</sup>lt;sup>1</sup> For more information on Security Logic, please contact PCP Inc.

#### Timing

As NGO's and humanitarian agencies continue to "cluster" their efforts in the field the timing is ideal to provide technological supplies, support and a common operating platform to their efforts. With the further development of the comprehensive approach and joined-up efforts for mitigating crisis and disasters the availability of co-coordinated communication is ideally timed. The economic downturn coupled with a noted increase in disaster and crisis interventions positions CAN-AID to be widely adopted by NGOs and humanitarian agencies.

Similar to most industries, NGO's and humanitarian agencies have ongoing technology requirements to support day-to-day operations. Whether in the field or in headquarter offices, staff have an ever expanding need to purchase updated technology hardware and software.

#### The Solution

Can-Aid can support the community of stakeholders by providing solutions to these communication/coordination/support challenges through a *Communications, Coordination and Crisis Response Centre in a Box.* 

A paradigm shift is required from thinking of NGOs and humanitarians as a *sector* towards considering peace practitioners as an *industry*. This paradigm Can-Aid allows us to consider the technological requirements, support, training, and implementation required by the peace industry writ large. The timing has never been more important for international governments to explore new ways to support crisis management, long-term development, and more importantly, preventative programming. If positioned correctly, CAN-AID can support this change through incorporating private sector interests, financial lending institutions, and the crisis response and management capabilities required to respond to social, economic and emergency requirements within the international community of states, especially in the post-conflict phase of intervention.

#### Response

Some organizations place too great a focus on the difficulties in obtaining the trust and buy-in of the NGO and humanitarian communities. This has traditionally been a challenge due mostly to a critical lack of understanding of the organizational cultures of this community, as well as the inability to deliver any value that benefits these professionals in their work. Low cost, sustainable, cooperative frameworks that assist this disparate community in working together through information sharing are inconsistent at best.

It is primarily for this reason that PCP Canada recommends that CADSI position itself to coordinate a comprehensive approach to operations by bridging the non-governmental organization (NGO) stakeholders with NATO MNE5-6 processes and other joined-up mission opportunities by assisting in the provision of low cost, sustainable, cooperative technology frameworks that can assist this disparate community to work together through safe and responsible information sharing.

#### What we do

Peace & Conflict Planners Canada Inc. (PCP Canada) is a research, innovations and development company with strengths in cultural and economic projects. We develop projects by respecting the culture of the organizations we support, as well as their client base. Our projects are developed through the assessment of current geo-political issues, and we forecast outcomes and build these into programming and consulting recommendations with a compendium of economic and financial modeling. PCP Canada is a member of CADSI.

#### CAN-AID... RECOMMNEDATIONS TOWARDS INNOVATION

It has been recommended that CADSI/CAN-AID can fill small niche roles so not to overlap with existing software, web-portals, communication systems and lengthy/costly political initiatives. PCP Canada differs from other organizational philosophies with regards to the future direction of Canada and its resulting expectations for success. PCP Canada recommends a significant need for CADSI to adopt a crisis response and management leadership role, which builds trust and cooperation among stakeholders.

The following recommendations for CADSI and CAN-AID address this perfect storm by supplying, supporting, and mobilizing coordinated capabilities of crisis response and management stakeholders.

#### Recommendations

It is recommended that CAN-AID become the primary finance and distribution organization for communications hardware and software technologies to the global NGO and humanitarian communities in support of achieving CAN-AID objectives within the context of crisis management.

#### I. Hardware

A spectrum of "off the shelf" existing technologies and providers are to be identified through research based on an assessment of field requirements of the products and services provided by CADSI members. From this, a *CAN-AID Gear Box* will be developed for field use.

The basic CAN-AID Gear Box can include:

- 1. 3 laptops loaded with software:
  - a. dashboard software
    - b. simulation programming
    - c. communications technology and protocols
    - d. response programming
    - e. real-time training
- 2. 3 international cell phones
- 3. 1 mega phone
- 4. 3 digital camcorders
- 5. 3 digital cameras
- 6. 1 printer with refillable ink cartridges
- 7. 3 mini tracking beacons
- 8. 1 shock/water proof carrying case and three carrying bags
- 9. 20 usb keys
- 10. power adapters/recharge kit
- 11. network cables
- 12. 100 CAN-AID stickers, for office door, equipment, vehicles, etc.
- 13. other

#### II. Software

An "open source" software *research* collaboration be developed and available to support NGOs and humanitarians using CAN-AID technologies.

#### III. Can-Aid Dashboard

Design and develop a standard interface dashboard for crisis management that supports existing software. Field technology packages (CAN-AID Gear Box) can be pre-loaded with the dashboard and supporting standard software and systems. Standard selected software like Microsoft word can also be listed in the dashboard display and segmented using the "NATO standard" command and control interface design.

The only difference will be the design features, images, graphics and text logic selected to suit the NGO and humanitarian identities and cultures. The EBAO logic will be designed to support the user in arriving at an end state success, aligned with crisis management, post-conflict reconstruction, and sustainable peace.

#### **IV. Finance Model**

CAN-AID offers the world's first completely integrated technology communications system with the best financing offer and support incentives to all crisis response and management professionals.

Develop a financial model in which NGO's and humanitarian agencies have access to low or no money down, low interest, low payment financing for all required CAN-AID crisis management technologies. These same technologies will have day-to-day business supports designed to assist the success of NGO's and humanitarian agencies with ongoing business and operations needs. Additional financing terms can be built into the system for clients to add new technologies and purchase new upgrades as well as updated software and supports. Refer to Appendix B for additional information on a potential financing package for NGOs and humanitarian agencies.

The financing can be supported in two ways:

1. Trust Fund

An international trust with its investment returns used in support of CAN-AID.

2. Private Sector Funding

A private sector finance venture backed by international governments investing in national CAN-AID response capabilities.<sup>2</sup>

CADSI and CAN-AID can organize private sector CADSI members by leveraging existing relationships.

The private sector can manage the technology and financing, and CAN-AID can focus on the R&D, field application and distribution within the NGO and humanitarian communities.

<sup>&</sup>lt;sup>2</sup> However structured, it will be important to consider private sector business interests. Further models can be explored.



#### V. Ongoing Development

It is recommended that through the CADSI SME Committee and wider association membership that an open forum be developed for research and software design contributions to be included into the support structure of the CAN-AID crisis management system.

#### **VI. Additional Recommendations**

Additional recommendations can be found in Appendix C.

#### CAN-AID... SUMMARY

These recommendations create a dramatic value-added proposition to the NGO and Humanitarian communities to become involved in CAN-AID. By providing a 60% "below market" financing model to potential CAN-AID users for *CAN-AID Gear* designed to support both field crisis management as well as day-to-day business operation requirements, the CAN-AID community will be able to move forward more quickly. CAN-AID will become the world's premiere supplier of technology and communications support to the crisis management community.

The CAN-AID operating model could be completed and launched in 3 months and be able to meet some crisis management requirements immediately. Can-Aid Gear could be deployed in 5 months to a beta test field community. Software and systems research could be continually developed, improved upon and deployed on a continual basis.

CAN-AID would use government economic stimulus funding to support the financing of crisis management response requirements. Private sector ICT product companies would benefit from the sales and new revenues. NGO and Humanitarian organizations that are currently struggling financially would benefit from unprecedented governmental and private sector support through equipment and infrastructure upgrades to match those of military capabilities.

From an operational perspective, these recommendations could result in CAN-AID providing a high-value product and service to the international crisis management community, while achieving a higher degree of measurable mission success, and buy-in and trust from this community.

Strategically, CAN-AID could become a leader in NGO and Humanitarian crisis management support, while advancing the international community's agenda for comprehensive and coordinated operations.

#### ABOUT US AND CONTACT INFORMATION

About Us

### PEACE & CONFLICT P L A N N E R S

PCP Canada Inc. is a member of CADSI.

PCP Canada Inc., lead by president Dr Sarah Jane Meharg, is a research and innovations company with 10 years of international and national experience. We have a strong management team with a proven entrepreneurial track record. The company is proud of our multi-dimensional strategic alliances and partnerships and adaptable teambased organizational structure.

Since 2000, PCP Canada Inc. has specialized in new-use technology research, innovations and development in the area of cultural and economic acceleration. At PCP Canada Inc., we are familiar with implementing contemporary business practices grounded in web 2.0 social networks, crowd-sourcing, and governance 2.0 frameworks.

Dr. Sarah Jane Meharg is Canada's leading post-conflict reconstruction expert. She is a member of multiple policy advisory committees and think tanks such as the Canadian Defence & Foreign Affairs Institute (CDFAI), Centre for Security and Defence Studies (CSDS), and the Strategic Defence Forum (SDF), which all support the Canadian Government's international defence and development programming. Dr. Meharg is Adjunct Professor in the Politics and Economics Department at the Royal Military College of Canada. Her economic development research is focused largely on innovative advanced technologies and developing knowledge economy business investment models. Dr. Meharg researches international best practices for North America applications.

Her current contributions in the field of peace operations, peacebuilding and international development have been instrumental to many NATO, UN, AU, EU, U.S. and Canadian multi-national policies and projects.

Dr Meharg leads a team of practitioners that have over 75 years of collective experience in international economic development, private industry practices, and business development.

Our professional team provides extensive project management experience in areas of post-conflict reconstruction, designing measures of effectiveness systems, human rights monitoring and evaluation, protection of cultural heritage, developing economies and cultures in transition, economic acceleration, humanitarian development projects, military innovations, and peace and security strategies. Our professionals are thinking about and developing the solutions for tomorrow. They are academic, humanitarian, military, and active business professionals who are highly qualified and internationally respected for their ongoing contributions in transitional development, peace, and security.

#### Contact Information

Project Manager: John Meharg, Director, Research & Innovations Peace & Conflict Planners Canada, Inc.

Phone:	+1.613.448.1144
Email:	mehargj@pcpcanada.com
Web:	www.pcpcanada.com
Skype:	armourgroup

Mail: PO Box 632 Chesterville, Ontario Canada K0C 1H0 Appendix A: Industry Example: Shelter in a Box



<u>http://www.shelterbox.org/uploads/files/ADecadeOfDisasterRelief.pdf</u> The history and contribution of shelter box.

#### Appendix B: CAN-AID Gear Financing

Estimated Purchase Cost: \$9100.00

Sample Financing: \$200.00 down payment \$50.00 /mo. 2% interest for 10 years

1000 CAN-AID members...\$50,000 /mo. financing payment 10,000 CAN-AID members...\$500,000 /mo. financing payment

Unlike the billions of international tax dollars invested into NATO over 50 years to achieve cohesive communication and command systems, CAN-AID can apply *existing* communication standards developed for NATO militaries without having to reinvest in R&D.

In addition, CAN-AID can use private sector ICT and emergency product companies to apply the same communication capabilities to NGO's and humanitarian, private sector and other emergency response actors at a fraction of the cost incurred by NATO and other military organizations.

#### **Appendix C: Additional Recommendations**

#### Local Engagement

In emergency and crisis management environments CAN-AID could institute a job creation program by issuing CAN-AID GEAR to the affected local population. These technologies would be developed to allow for local representatives to become CAN-AID ambassadors bridging relationships and trust between the CAN-AID international response community and the local recipient population.

The CAN-AID Perspective concept would be developed to support a much under supported area of crisis management, that of educating local affected populations as to what the international community's goals, processes, social responsibilities and operating mandates are. Local media, educators, community activists, and leadership would use CAN-AID to educate local populations, support local projects and programs, communicate local needs to the international community of actors, and even evaluate and report from a local perspective, the international development projects and programs. This would make CAN-AID an open and transparent local population support concept.

#### Emergency Response Application

*CAN-AID* Gear can be pre-distributed to NGO's, emergency response teams, private sector crisis management companies, fire fighting and public safety agencies, and all active personal with responsibilities and roles in crisis environments.

#### Simulations

During times of relative peace, CAN-AID Gear can be used to support simulation exercises. CAN-AID technologies and response programs would then be tested in a controlled, evaluated, educational simulation response environment. The ability to assess simulations against efficiencies is currently unavailable within the crisis management sector. Through such simulations, CAN-AID can demonstrate improvements in crisis response and management and response.

#### CAN-AID Supporting Prevention

CAN-AID can also be applied to prevent conflicts and mitigate the effects of natural disasters. CAN-AID technology can be used to create cohesive approaches in national prevention programs that are designed to measure impact and outcomes of crisis management in intervention programming.