

Centre for Emerging and Zoonotic Disease
Integrated Intelligence and Response [CEZD-IIR]

Centre for Emerging and Zoonotic Disease – Integrated Intelligence and Response

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CEZD-IIR - *Fostering multi-disciplinary perspectives to generate anticipatory intelligence for relevant communities*

What are CEZD's anticipated outcomes?

The objective of this innovative project is to enhance intelligence generation capability and capacity in the area of zoonotic and emerging diseases through:

- Integration of information and intelligence sources;
- Collaborative analysis of the information via a shared platform (the Canadian Network for Public Health Intelligence [CNPHI]); and
- Timely distribution of outputs for the use of the community via a range of communications channels.

What information will CEZD provide?

- The intelligence machine is aimed at
 - identifying early warning signals
 - producing anticipatory intelligence warnings.
- Generating timely intelligence responsive to needs of decision makers and operational personnel.
- Intelligence Outputs will be customized and tailored to meet the requirements of the target community of practice pursuing a range of reporting mechanisms to accommodate specific end user needs.

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The three-year project is funded via:

- the Canadian Safety and Security Program (CSSP), a federal initiative managed by Defence Research and Development Canada's Centre for Security Science (DRDC CSS), as well as the in-kind contributions of fourteen multi-jurisdictional partner organizations.
 - Lead Agencies: CFIA and PHAC
 - Timeframe: April 1, 2013 – March 31, 2016

ADVISERS

- Dr. Tim Ogilvie, Atlantic Vet College, PEI, Canada
 - DAFF Australia
 - Defra, UK

<p>Canada</p> <ul style="list-style-type: none"> Canadian Food Inspection Agency [Lead] Public Health Agency of Canada Agriculture and Agri-Food Canada <hr/> <p>DEFENCE RESEARCH AND DEVELOPMENT CANADA'S CENTRE FOR SECURITY SCIENCE (DRDC CSS)</p>	<p>Alberta</p> <p>GOVERNMENT OF ALBERTA Agriculture and Rural Development</p> <hr/> <p>BRITISH COLUMBIA</p> <p>GOVERNMENT OF BRITISH COLUMBIA Agriculture</p>
<p>Manitoba</p> <p>Government of Manitoba MAFRI</p> <hr/> <p>Ministère de l'Agriculture, des Pêcheries et de l'Alimentation</p> <p>Québec</p>	<p>Canadian Animal Health Coalition CAHC CCSA <i>Promoting a collaborative approach to animal health</i></p> <hr/> <p>Canadian Wildlife Health Cooperative Réseau canadien de la santé de la faune</p> <hr/> <p>TDV TDV Global Inc</p> <p>Canadian Regulatory Veterinary Epidemiology Network (CRVE-Net)</p> <hr/> <p>SAGARPA</p> <p>Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food Mexico</p> <hr/> <p>USDA Animal and Plant Health Inspection Services United States Department of Agriculture</p>

OTHER PARTICIPANTS

- Public Safety Canada
 - Canadian Security and Intelligence Service (CSIS)

PROBLEM DEFINITION

- Zoonotic and emerging diseases such as influenza and SARS can pose grave threats to public and animal health, the economy and food production systems, and their impact is compounded by the ease by which they can circumvent national borders.
- In Canada there is no single organization or agency that has responsibility for detection, control and response with respect to these diseases – a collaborative structure.
- There is a critical gap in Canada and internationally with respect to the generation and distribution of “intelligence” to support effective anticipation, detection and coordinated response to emerging and zoonotic diseases.

FOUNDATIONAL PRINCIPLES

The project has been designed around three foundational principles:

- The project will employ existing sources of information and build off of existing investments in IT platform infrastructure in order to avoid “reinventing the wheel” and to leverage the value of existing systems
- The project will make use of non-classified information sources to maximize collaborative access among project partners and future stakeholders, and
- Sustainability of the network over the long-term through relevance to the community and effective use of resources.

INTELLIGENCE “MACHINE”

- Modern IT tools supporting an integrated network of analysts ...
- ... providing intelligence products for effective decision-making and risk management.

*** Intelligence:**

Identification of early warning signals from the collation of open (web-based and community supplied) information sources by relevant communities of practice.

“The right people plus
the right tools”

CEZD-IIR STAKEHOLDER & PARTNER SURVEY RESULTS

- 78% indicated that their organization produces information
- 56% indicated that their organization produces intelligence

- 70% provided examples of the information and intelligence that they use/source from organizations other than their own.

- 49% confirmed that they would be interested in collaborating with CEZD-IIR on the collection, production, and distribution of intelligence.
- 37% require more information before deciding, such as expectations for collaboration, distribution details, resourcing, and quality assurance.

Internal Sources of Information and Intelligence

External Sources of Information and Intelligence

Collaboration with CEZD-IIR

Stakeholders support the CEZD-IIR project and would welcome additional information and details

The Need for Emerging and Zoonotic Disease Information and Intelligence

Open Sharing or Restricted Access

Pushed or Pulled

- 90% of respondents see a need for better intelligence and/or information in their work
- 85% of respondents believe that their organization sees value in the production and utilization of intelligence.
- 39% support a combination of "open sharing" and "restricting access to certain audiences."
 - 34% support open sharing of information and intelligence
 - 24% support restricting access to certain audience
- 63% prefer that information and intelligence is both "pushed," such as by email or list serve, and "pulled," such as through a query or search function

GENERAL CONCLUSIONS

- The surveyed community was supportive of the concept, validated the need and provided valuable input through the survey
- More information is needed by the community on what the expectations of partners are and the “hard components” of the design which will be addressed through the system design document
- There is still a need to determine if some or all of the information needs to have restricted access

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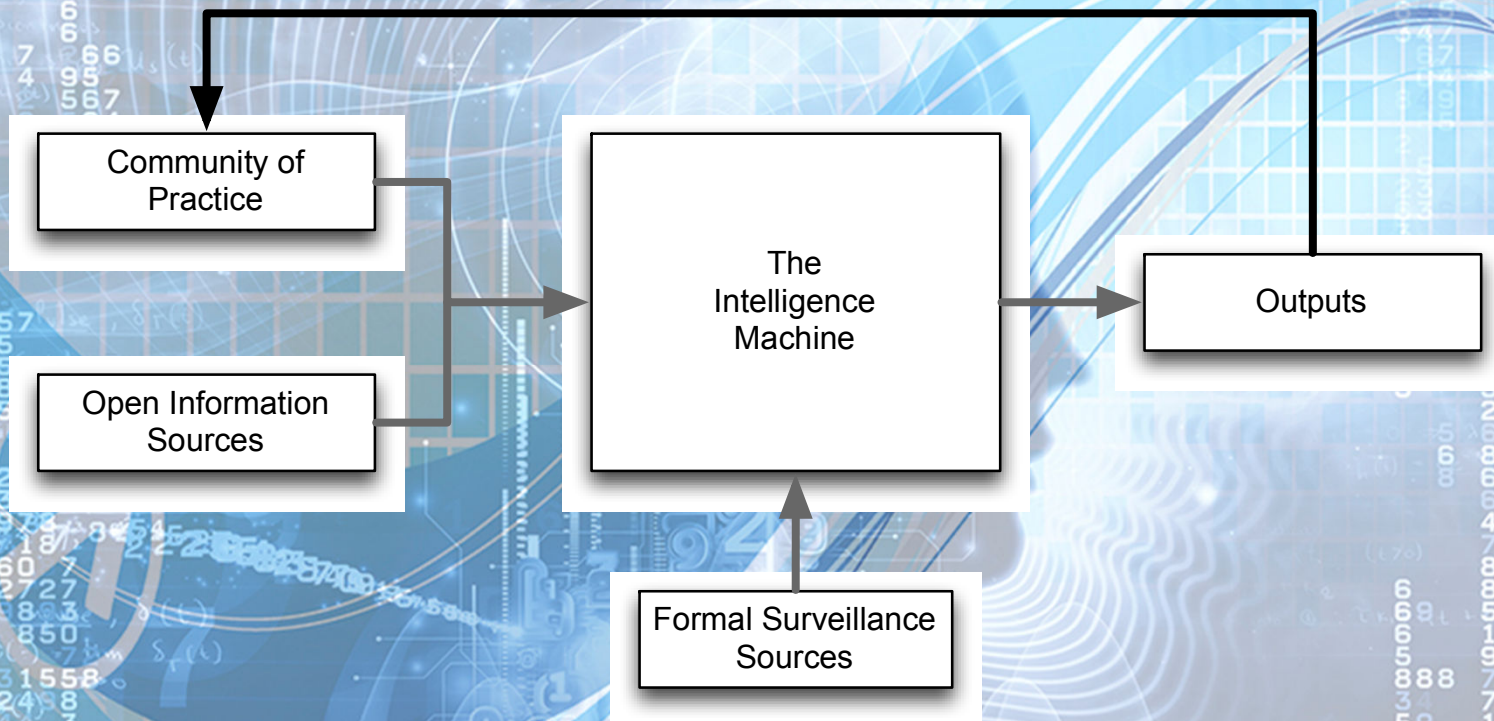
Next Steps

- Draft Governance Model Development (October 2014 to June 2015)
- Draft Capability Sustainability Plan (June 2015)
- Alpha Pilot to launch April 2015
 - Information Source Selection Criteria Tool: underway
 - Define and engage pilot community: January 2015
 - Design intelligence report: November 2014 start
 - Technology configuration and testing
- Beta Pilot to launch Fall 2015
 - Lessons learned from α pilot
- Final pilot release targeted for January 2016

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Annex: The Intelligence Machine



**Intelligence: Identification of early warning signals from the collation of open (web-based and community supplied) information sources by relevant communities of practice.*