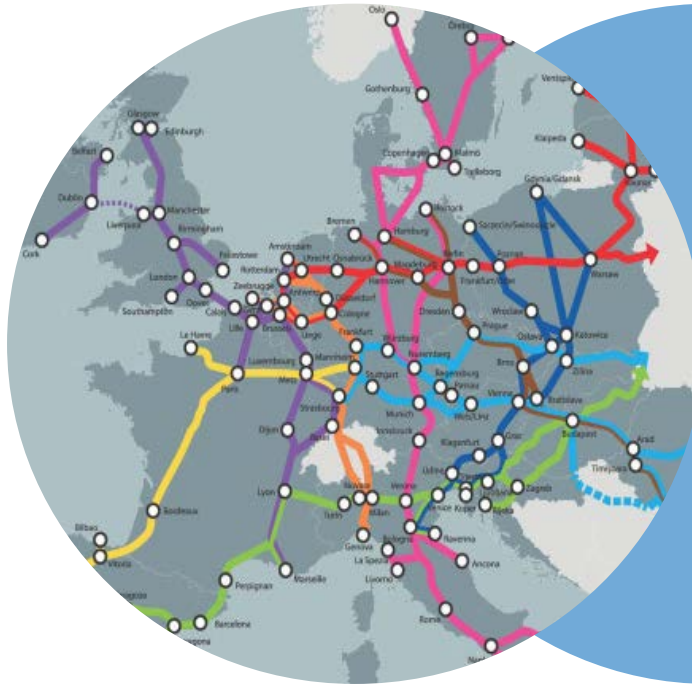




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Milan (ITALY)



Good Practices within Regional CIP-R Programmes: an international overview

5th International Workshop on Regional Critical Infrastructure Resilience
Resilience partnering

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Agenda

- Study Objective and Methodology
- Overview of the identified Good Practices
- Assessment of Good Practices
- Conclusions



Study Objective

To assess current successful good practices supporting the implementation of Regional CIP-R Programmes.

Good Practice – It is any collection of specific methods that when applied solve an existing problem, produce expected results and bring benefits.

In our study it applies to available knowledge to addressing:

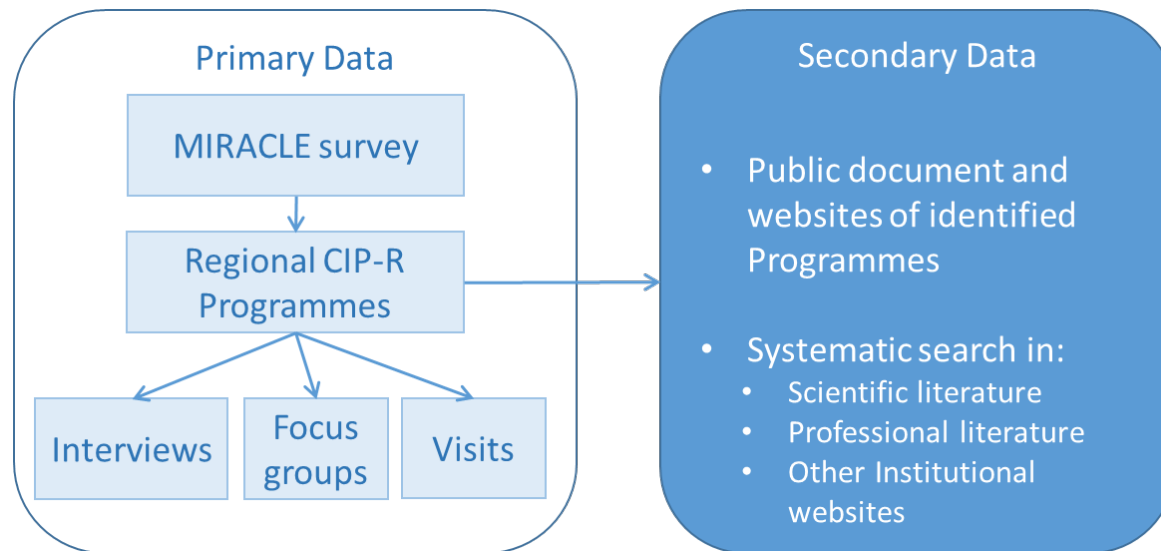
- Establishment and management of regional PPPs for Critical Infrastructure Protection and Resilience;
- The achievement of their main objectives and specific goals.

Previous studies on GPs for CIP-R

- US Federal Emergency Management Agency (**FEMA**)
 - Attributes that define a successful partnership - PADRES model (**P**ublicly **A**ccessible, **D**edicated, **R**esourced, **E**ngaged, **S**ustainable)
- The European Network and Information Security Agency (**ENISA**)
 - *Good Practice Guide on Information Sharing* (2009) - how to set up and run Network Security Information Exchanges
 - *Good Practice Guide on Cooperative Models for Effective Public Private Partnership* (2011) - aspects that add value when setting up and running PPPs
- Business Continuity Planning for Critical Infrastructures (**BUCOPCI**) Project
 - *Business Continuity Best Practices Report* (D1.2) and *Security Plan BPs Report* (D1.3)
- Recommended Elements of Critical Infrastructure Protection for Policy Makers in Europe (**RECIPE**) Project
 - Set of GPs for covering areas of interest in CIP policies
 - High level principles and theoretical approaches

Study Methodology

- Data Collection and final selection of GPs



- GPs classification and documentation
 - Tools and Technologies
 - Activities and Processes

Strengthening CIP-R at regional level

Documentation and review of relevant Regional CIP-R Programmes

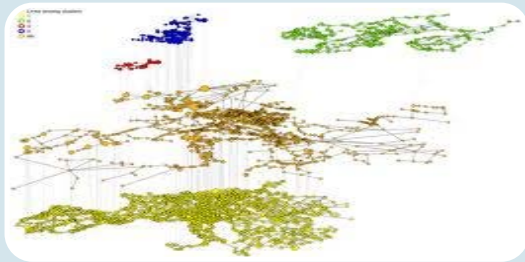
Region	Successful practices supporting CIP-R Programmes
Kennemerland Safety Region (The Netherlands)	<ul style="list-style-type: none"> • Partnership not convened as a single entity – operates through a series of working groups • Safety Regions organised under a common legal framework, with subsidiarity at strategic and tactical level • Nationally developed EM information system (LCMS) – a net-centric, web-based data system • Multi-level partnership arrangements in every region, between regions (cross-region support), and scale-up from regional to national • Development driven by shared concerns of front line organisations who wish to collaborate • Sharing of resources – reduces costs, provides access to scarce requirements
Scotland (UK)	<ul style="list-style-type: none"> • <i>Preparing Scotland</i>, set out as a ‘hub and spokes’ model – the hub, including philosophy, principles, governance structures, regulatory and good practice guidance • Support by the Government, providing Leadership, Enabling Partnerships and reviewing Outcomes • Principles of Integrated EM – <i>All hazard approach</i> • Government <i>Protective Marking Scheme for exchange of information</i> • Operation Estrela – infrastructure resilience exercise programme to threat from insider attack
Lombardy (Italy)	<ul style="list-style-type: none"> • Systematic identification of information needs and missing information flows in EM • Focus on interdependencies information with regard to service delivery at node level, not proprietary and sensitive business or asset data • Collaborative web platform for cross-sector information sharing and collaborative EM • Thematic Task Forces for collaborative discussions and bringing actors together

Strengthening CIP-R at regional level

Documentation and review of relevant Regional CIP-R Programmes

Region	Successful practices supporting CIP-R Programmes
Copenhagen Capital Region (Denmark)	<ul style="list-style-type: none"> • Comprehensive preparedness planning by DEMA, EM by Regional medical Service • Joint Danish-Swedish contingency plan for the Øresund fixed link, • Computer Based Alarm System Øresundsbron (COMBAS Ø) • Education – eLearning courses for incident handling (some common for DK and SE) • Full Scale Exercises (every 4th year), table top exercises, small scale exercises, alerting exercises (weekly)
Pacific North West (US and Canada)	<ul style="list-style-type: none"> • Blue Cascades Exercise Series as well as numerous tabletop exercises and roundtables • Northwest Warning, Alert and Response Net (NWWARN) for cross-sector info sharing • Gatekeepers are the trusted sources of information within an infrastructure • Focus on interdependencies information, not proprietary and sensitive business data • Working with organisations' emergency managers only
Montreal Metropolitan Community (Canada)	<ul style="list-style-type: none"> • Establishment of 'give-and-take' relationship. Each stakeholder senses benefits right away • Flexible cartography approach to preserve the confidentiality of information • Ways for only temporary pooling of information and limiting number of recipients • Keeping only the necessary actors at the table
Louisiana (US)	<ul style="list-style-type: none"> • BEOC as a single contact point between the government and businesses • BEOC serves as filter for information between businesses and the state government • Establishing B2B communication without government's involvement • Reliable situational awareness information provided to businesses by the government

Overview of the identified GPs



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Tools & Technologies

Information-sharing & collaboration

- V-BEOC
- NWWARN
- SUSI
- SATool
- LCMS
- EMERGEL
- Traffic Scotland Info System
- COMBAS Ø

Risk Analysis and Management

- DOMINO
- NAF
- GIS Mapping for CI Assets
- PRISM

Activities & Processes

Collaborative planning

- Blues Cascades
- MICC
- TTF
- Estrela
- CATEX
- Focus on Flows

Partnership building and alignment

- Big Business – Small Business
- Multi-State Fleet Response
- Partner Alignment for Enhanced Security

Assessment of the identified GPs

			LOCATION OF EXPECTED IMPROVEMENTS			
			Preparedness	Mitigation	Response	Recovery
TOOLS & TECHNOLOGIES	DOMINO tool		P	P		
	V-BEOC		P		P	P
	NWWARN	 	P	P	S	S
	COMBAS Ø	 			P	S
	SUSI		P		P	S
	NAF		P	S		
	SATool		P	P	P	S
	LCMS		P	P	P	S
	EMERGEL		P	S	P	S
	GIS Mapping for CI Assets		S	P	P	
	Traffic Scotland IS		P	P	P	P
	PRISM		P	P		
	ACTIVITIES & PROCESSES	Big Business – Small Business		P	S	
Blue Cascades			P	S	S	S
MICC			P	S	S	S
Operation Estrela			P		S	S
CATEX			P		S	S
Multi-State Fleet Response			P		S	S
TTF			P	S	S	
Focus on Flows			P		S	S
Partnership Alignment			P	S	S	S

■ P – Primary contribution
■ S – Secondary contribution

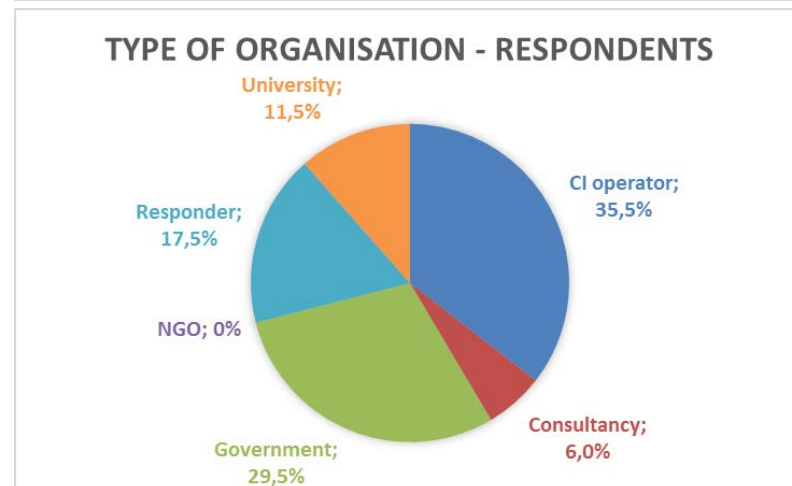
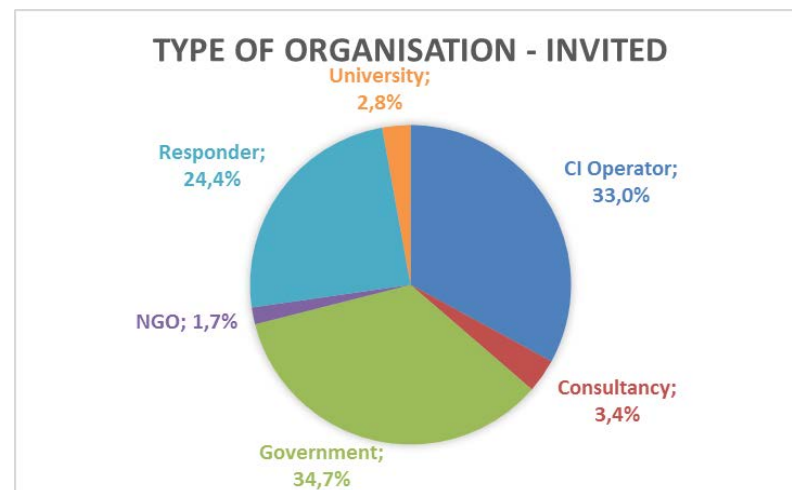
Assessment of the identified GPs

- Profile of invited international experts:

- Total: 176
- Nationality: 20 different countries (about 90% European)

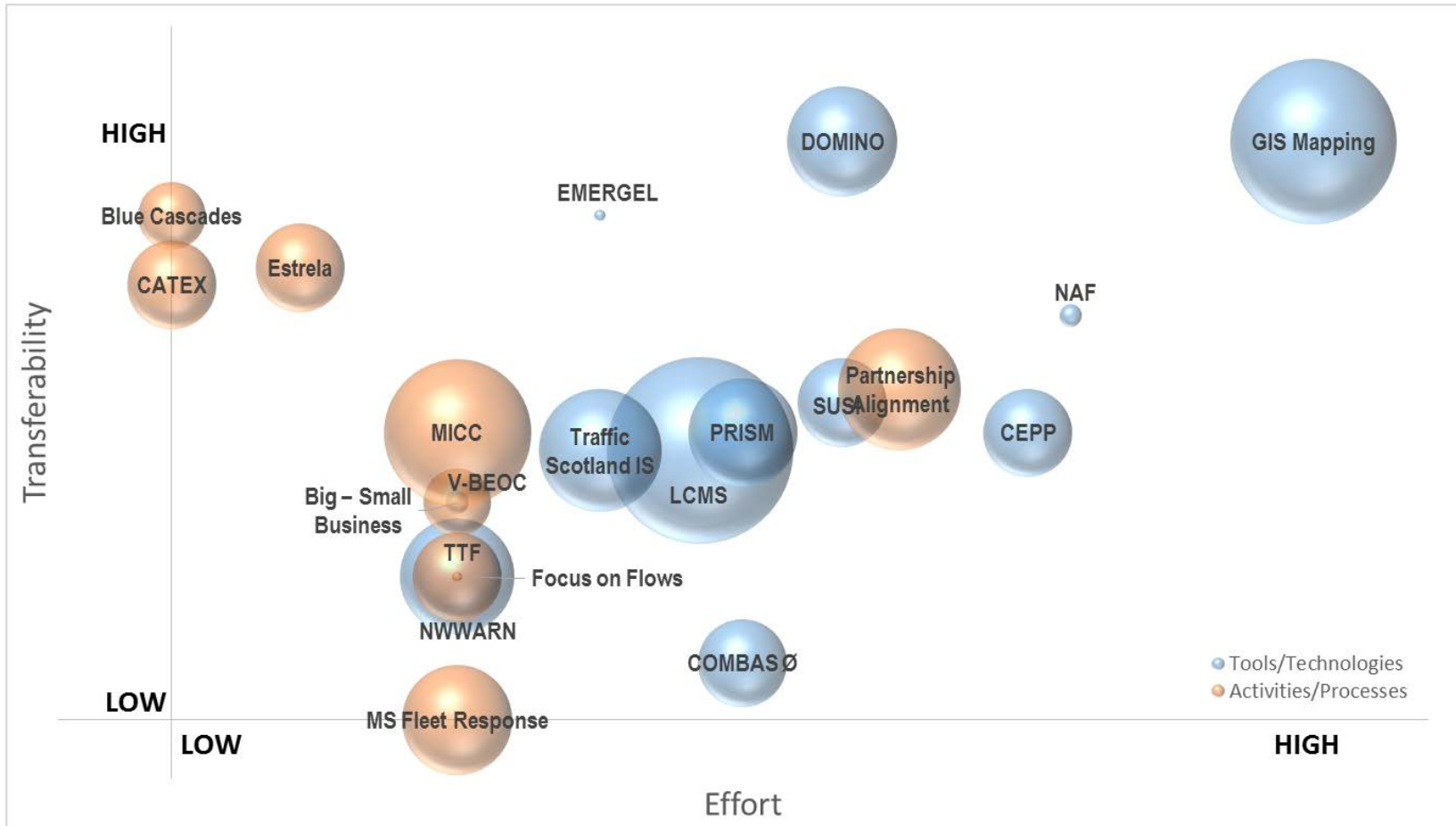
- Profile of respondents:

- Total: 20
- Nationality: 9 different countries (about 90% European)
- Years of experience: 5-35 (average: 21.3)





Assessment of the identified GPs



Conclusions

- All the practices received medium-high evaluations on Benefits and Transferability, which approves them as Good Practices
- No ‘quick wins’
- On average, *Tools and Technologies* bring greater benefits and possess higher transferability, but require more effort
- Practices are rarely directly transferable (*‘as such’*)
 - offering a hands-on experience would give practitioners a much better insight
- Little room for a successful substitution strategy
 - consider GPs as source of knowledge to enhance existing CIP-R programmes by expanding the scope and improving practices already implemented
- The majority of GPs contribute to the preparedness phase

Requirements for a toolkit for regional CIP-R programmes

THANK YOU!

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