

# Learning from past Disasters to improve Crisis Management

Future Security 2016

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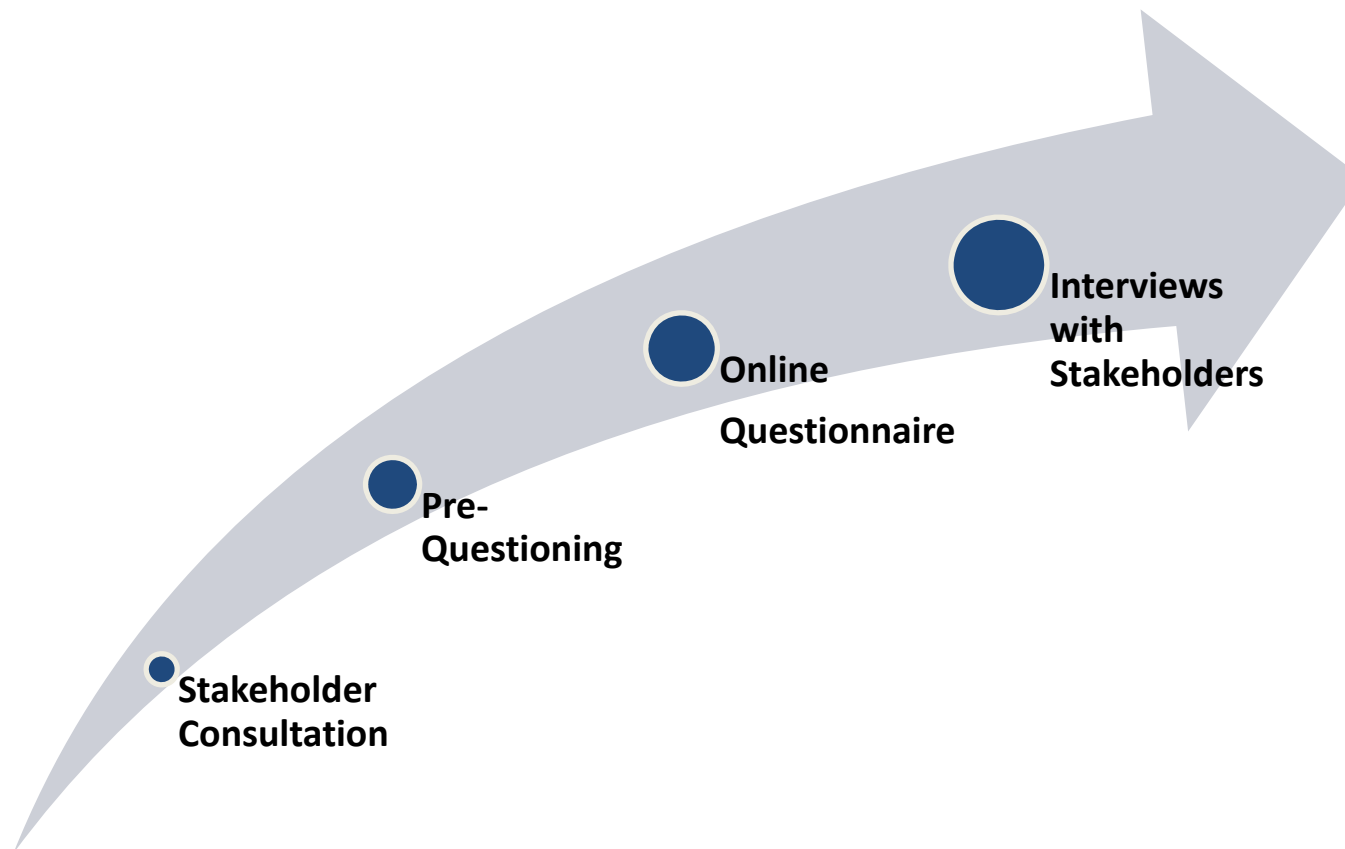
Establish Pan-European Information  
Space to Enhance seCurity of Citizens

## Introduction

- Research part of the EC-funded **EPISECC** (Establish Pan-European Information Space to Enhance Security of Citizens) Project
- Main Objective: To Improve **efficient communication** and access to **critical information** in crisis/disaster management
- Development of a pan-European **inventory** of past critical events/disasters
- Evaluation of **Best/Bad Practices from past disasters** across Europe
- Preparation of **Common Information Space** and adequate Information Exchange

## Methodology

- **Technical Approach:** Development process of EPISECC inventory



## Methodology

- **Identification of key stakeholders** for interviews which are experts in Crisis Management
- **Stakeholders** from Government ministries, Offices for Civil Protection, Police, Fire Brigade, Technical Relief Units and NGOs
- **Interviews conducted** usually in person or by phone
- Integration of information into the developed **online questionnaire** allowing quantitative and qualitative analysis
- Interview focusing on past events in Europe and specifically **sub-aspects of disasters**
- Focus on specific events including processes, measures, standards, data, etc.

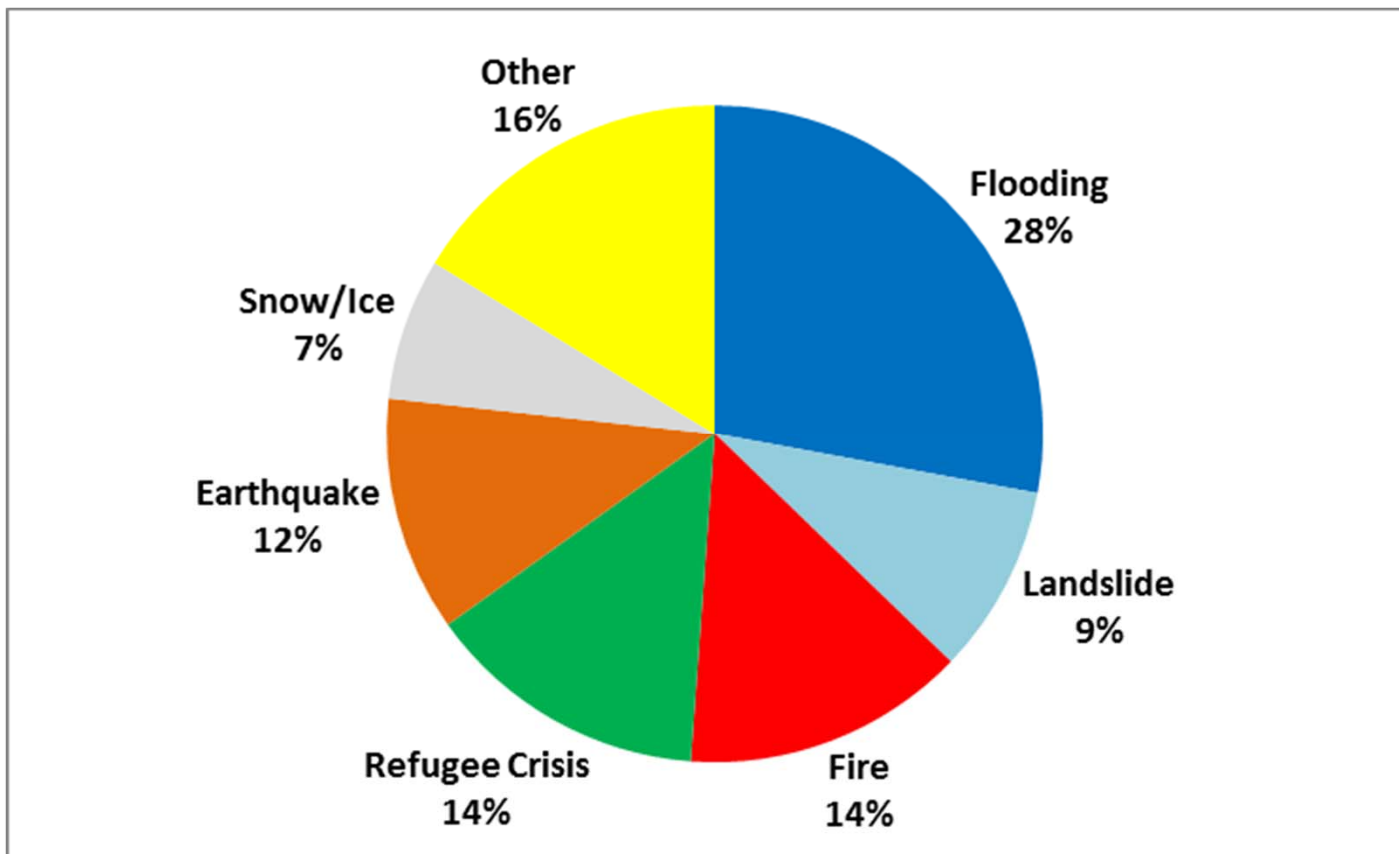
## Results – Distribution of Interview Partners



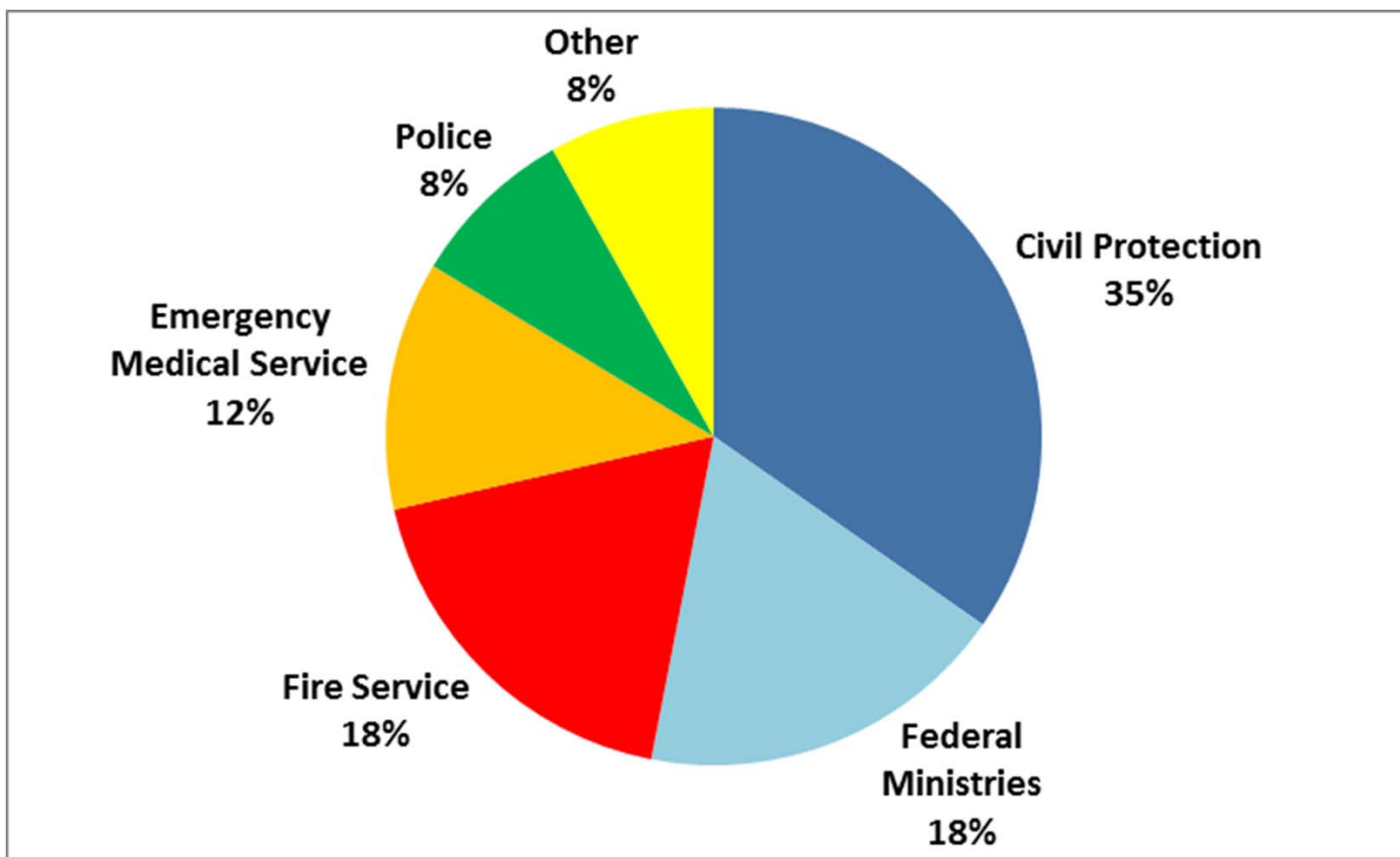
## Results - Interviews

- EPISECC Inventory:
  - **49 Interviews conducted**
  - **18 European countries**
  - **16 EU countries**
    - Austria, Italy, Croatia, Germany, Netherlands, United Kingdom, Slovakia, Slovenia, Spain, Poland, Denmark, Hungary, Sweden, France, Finland, Estonia
    - plus**
    - Norway, Switzerland
    - and**
    - Israel
  - **78% Governmental organisations**

## Results – Type of Event



## Results – Type of Organisation



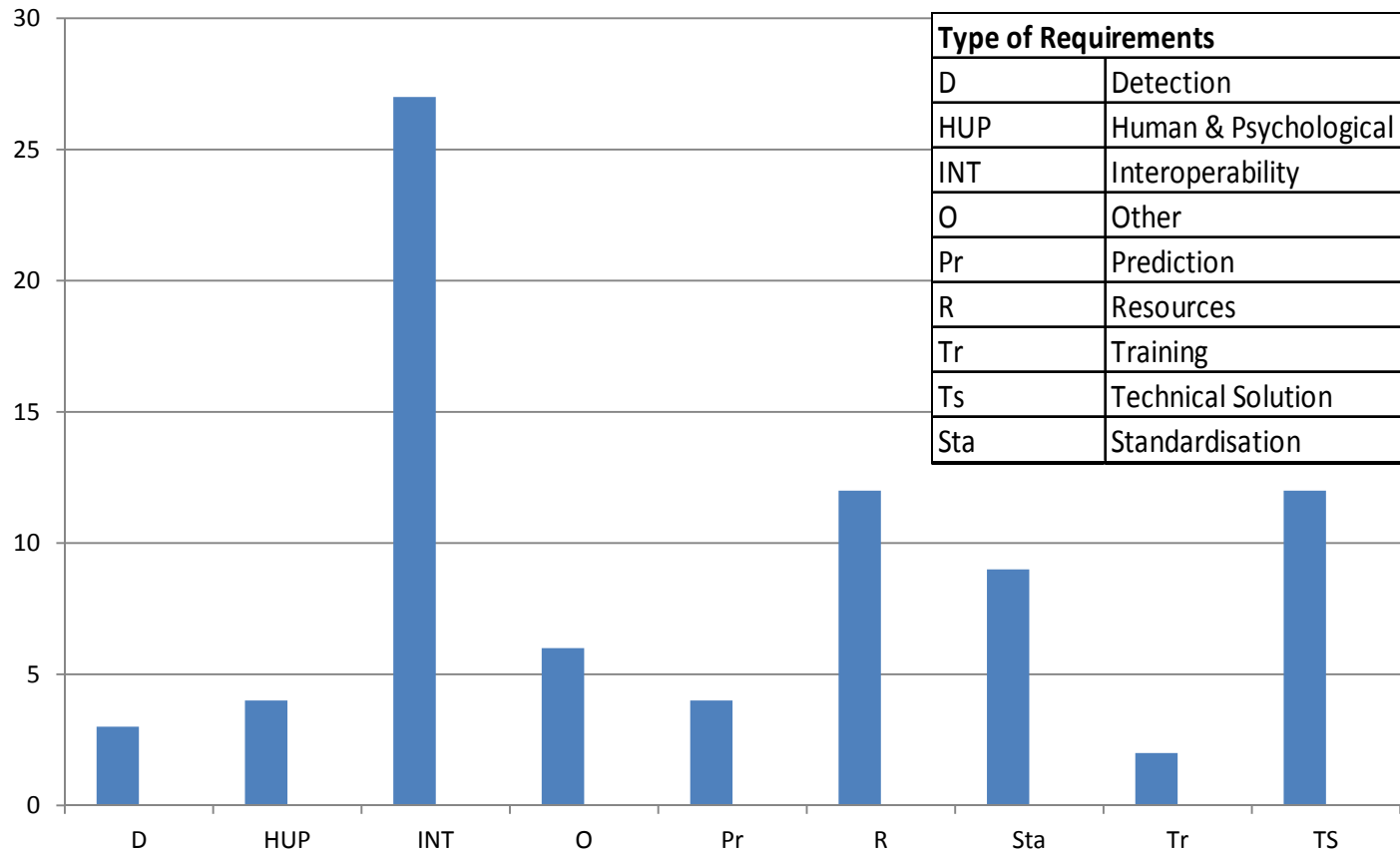


## Results - Tools

- **Huge variety** of tools used in the management of disasters
- 47 tools used by one organisation each
- **Tailor-made** for a specific organisation
- Specialised tool for **local context**
- Regarding use of tools and common standards the degree of **harmonisation** seems to be **low in Europe**

## Results – Expert Opinions

### Improvements in past disasters



In total 79 requests were expressed – Interoperability most important !

## Key Results – Interoperability Indicator

**A measure to quantify the quality of information exchange:**

0 = very bad, no information exchange

1 = excellent, best possible

**4 Parameters need to be assessed:**

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$$KI_{Int} = \left[ 0,5 \cdot (1 - T_{suc}) + 0,5 \cdot (1 - T_c) \right] \cdot \left[ \frac{D_{Tr-is}}{D_{Tr-id}} \cdot \frac{D_{Us-is}}{D_{Us-id}} \right]$$

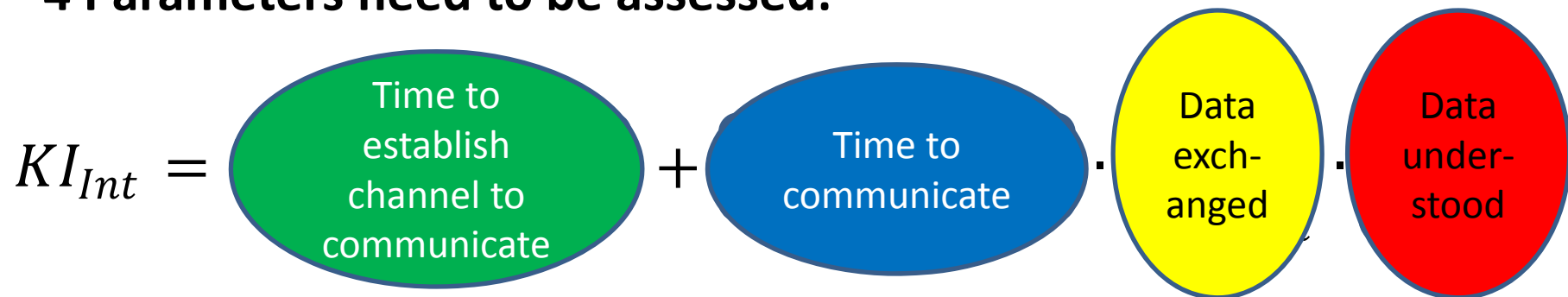
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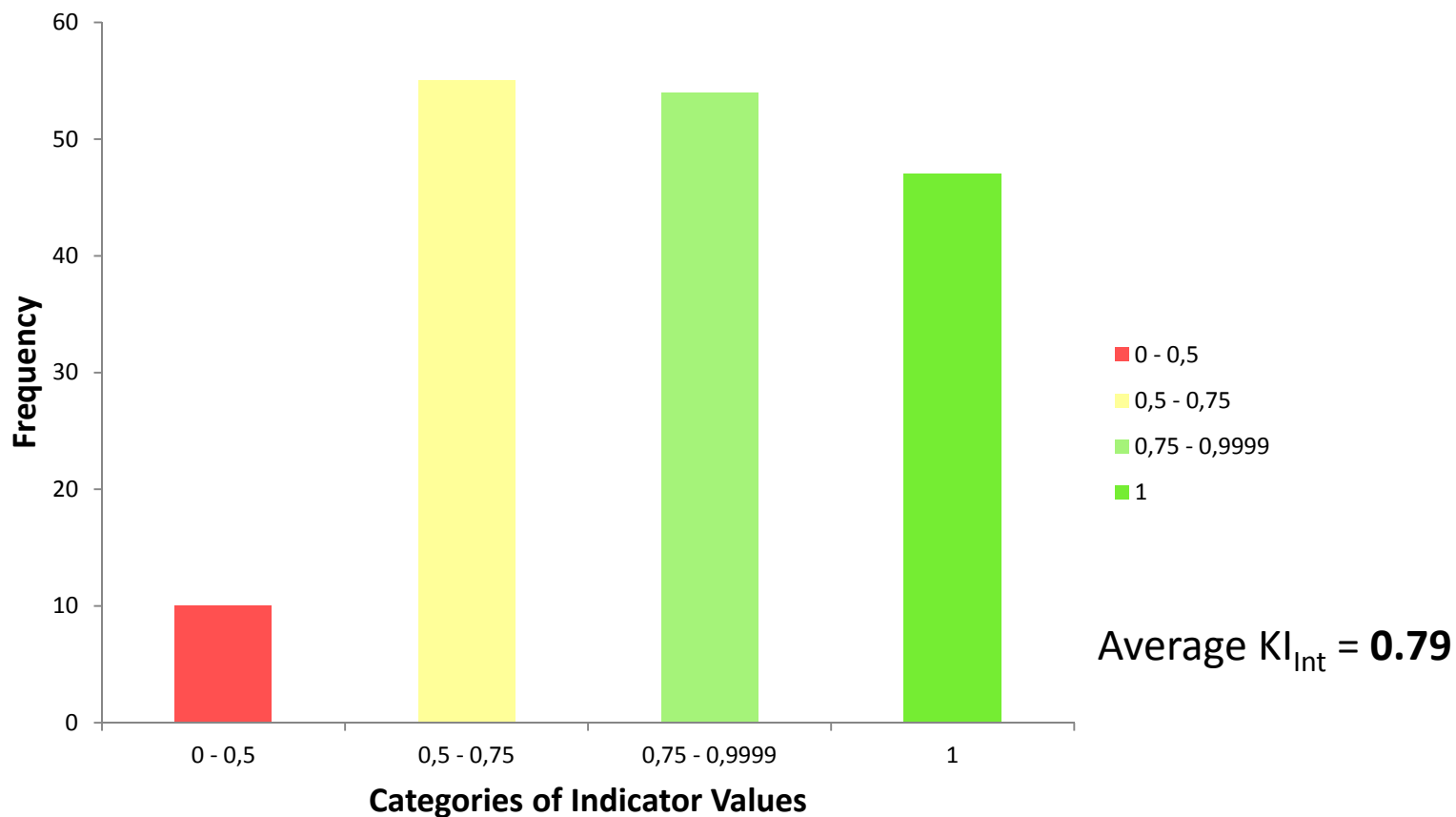
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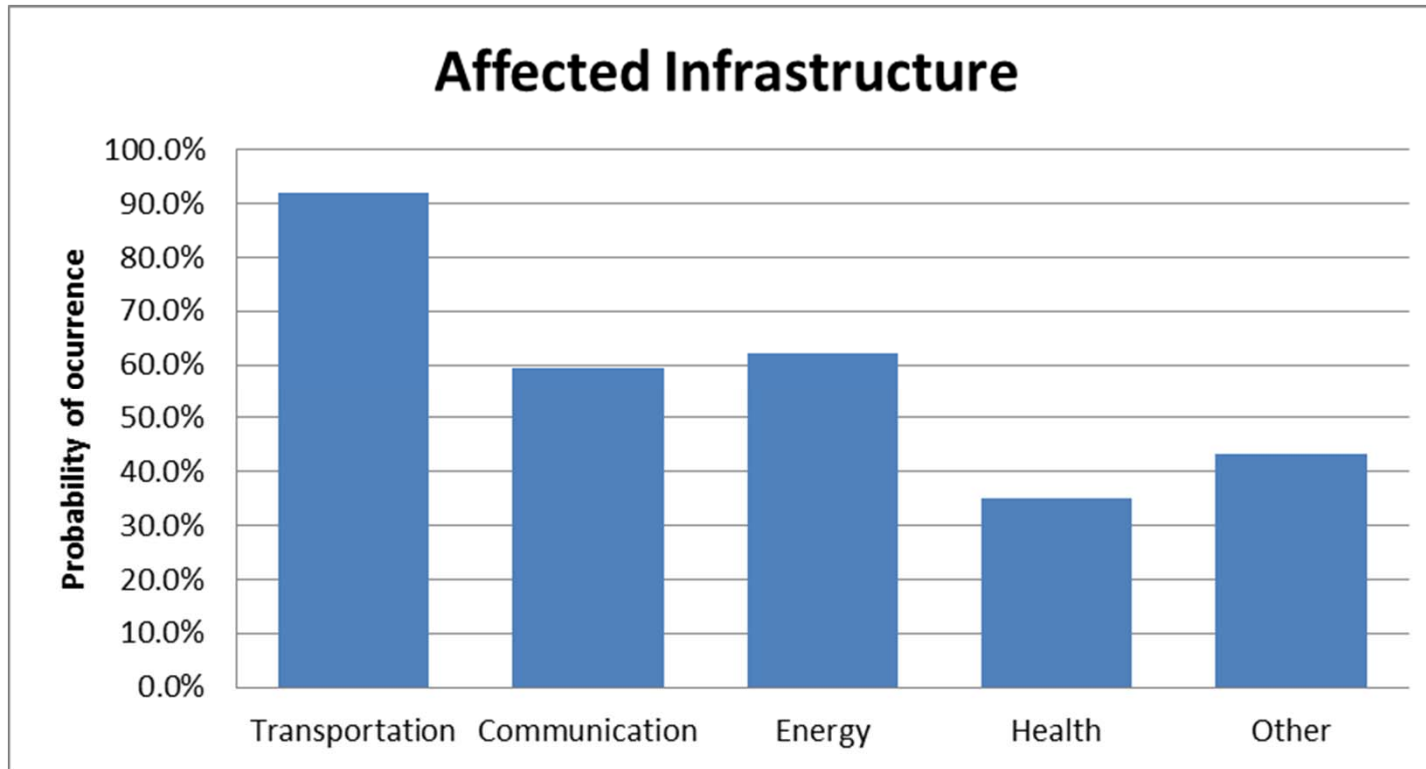


## Key Results – Interoperability Indicator

### Information Exchange in a specific situation



## Key Results – Infrastructure



➔ **Transportation affected in over 90% of disasters**

## Outlook

- **Information Interoperability** as crucial factor for crisis management
- Additional research into **Critical Infrastructure** and Crisis Management
- Additional interviews and analysis of events related to **Migration of Refugees**
- Use of Inventory to analyse **large accidents**
- Other EU-funded projects interested in using the EPISECC approach on the inventory (**SecInCore, Concorde**)
- Efforts to **maintain the Inventory** after the finalisation of EPISECC



# Thank you for your attention !

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