## How many shades of NIS?

Understanding organizational cybersecurity cultures and sectoral differences





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+1

*International and professional partners:* 

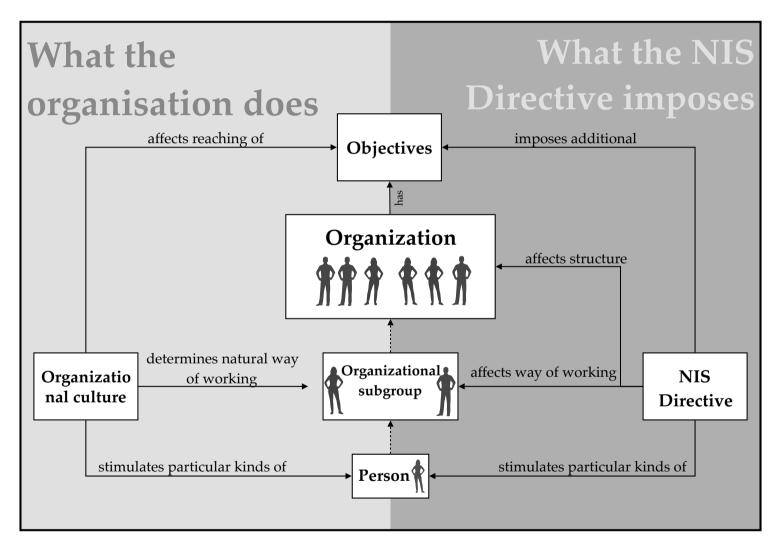








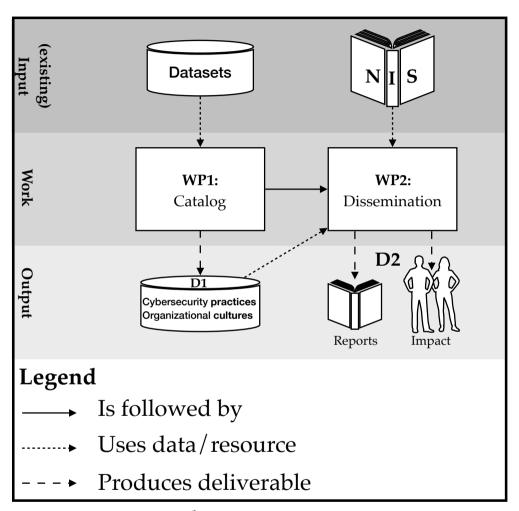
- 1. Managing security risk: Appropriate organizational structures, policies, and processes are in place to understand, assess and systematically manage security risks to the network and ISs supporting essential services.
- 2. *Protecting against cyber attack:* Proportionate security measures are in place to protect essential services and systems from cyber attack.
- 3. Detecting cybersecurity events: Capabilities to ensure security defences remain effective and to detect cyber security events affecting, or with the potential to affect, essential services.
- 4. Minimizing the impact of cybersecurity events: Capabilities to minimise the impact of a cyber security incident on the delivery of essential services including the restoration of those services where necessary.



**Figure 1**. Conceptual framework: imposition of the NIS Directive may *complement* and *clash* on several layers: the way people work, the way the organisation is structured, and how its objectives are achieved.

**Our goal is to** establish a baseline of cybersecurity efforts in essential infrastructure sectors in the UK, by *investigating* 

- 1. What **cybersecurity practices** are observed in organizations providing essential infrastructures?
- 2. What is the **organizational culture** in groups responsible for security in these organizations?
- 3. Is there significant difference between organizations or sectors in the practices they observe?
- 4. Is there significant difference between organizations or sectors in the cultures they have?
- 5. What is the relation, if any, between cybersecurity organizational culture and practices?
- 6. What practices, if any, are positively or negatively affected by specific organizational cybersecurity culture?



**Figure 2**. Workplan, showing work packages, existing inputs, and deliverables.

Our method is to use organizational etnography to gather rich data translatable into policy recommendations.

## or, to summarize: NIS vs the Real World

