

# ISAC INFORMATION SHARING PLATFORM

Architecture overview





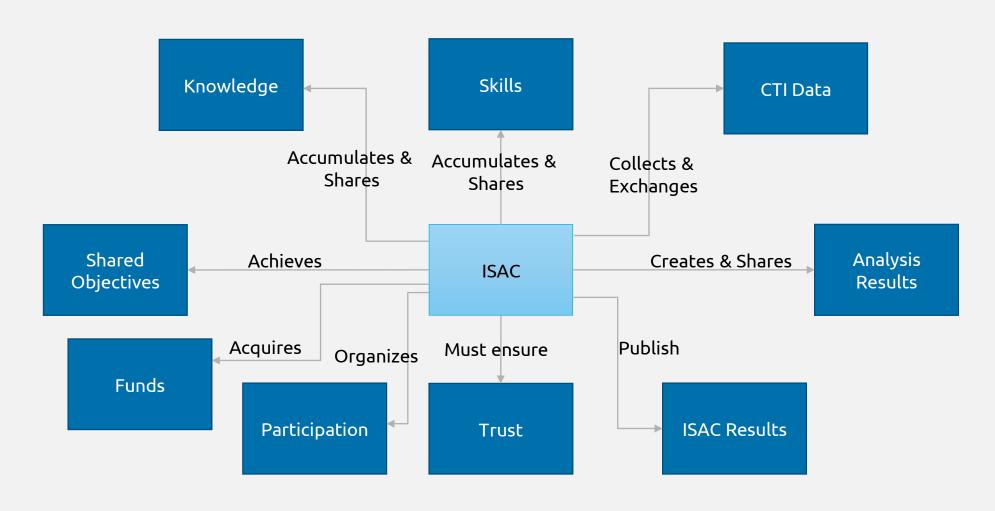






### Business Object Context Model of an ISAC

This Context Model lists the 'topics and things' (the Business Objects) an ISAC is concerned with. It also states what an ISAC 'does' with those topics and things.



### The history of the Technical Platform Requirements

#### Requirements collection process

We started with descriptions on EU ISAC generic objectives and current ways of working.

From there, we derived an initial set of functional requirements, expressed in terms of Technical Platform Functionalities.

Those Technical Platform Functionalities were validated and refined with stakeholders:

- With ENISA in dedicated online meetings
- With representatives of existing EU ISACs in dedicated online meetings
- With representatives of emerging EU ISACs and other interested parties during online events (e.g. Inter-ISAC Meeting, Thematic Workshops)

All input was used to refine the various Technical Platform Functionalities, leading to a comprehensive and prioritized list.

### Basic IT Platform Functional Architecture

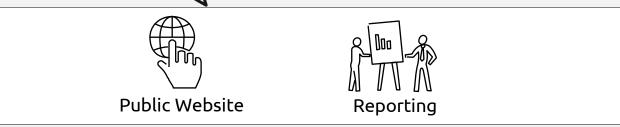
The overview of identified potential functionalities of the Technical Platform



#### **Knowledge Exchange**











#### **Underlying Services**



### Platform Security Attributes

- Defense in Depth fully implemented across infrastructure, applications and data (including network protection, multi-factor authentication, separation of roles, data encryption in transit and at rest). Security control maintenance (e.g. certificate management) done by centralized IT management authority.
- User activity auditing in place and monitored by the centralized IT management authority.
- Platform administration ('system admin tasks') done by the centralized IT management authority.
- User administration and user access management will be managed by ISACs (admin role per ISAC).
- A security test is part of platform delivery.

### Deployment and Infrastructure Attributes

- Centrally hosted deployments, SaaS style.
- Multi-tenant deployment, meaning ISACs share a physical instance of the applications and tools, which are logically separated:
  - Separate user management
    - User ids cannot be part of other ISACs user groups (no identity mixing)
  - Separate data management
    - ISACs cannot access each other's data

### Continued Involvement of the Target Community

- The ISACs Basic IT Platform is incrementally validated by representatives of the target community.
- The Empowering ISACs projects engages the target community through periodic Sounding Board meetings. Both the end-user and prospective operations stakeholders are members of the sounding board.
- The Sounding Board provides input on the direction of the evolution of the ISACs Basic IT Platform.

## Sounding board objectives

#### Objectives and expected workload

ISACs (EE-ISAC, ER-ISAC, EM-ISAC)

- Validate usability of the services (from an end-user perspective)
- Align on detailed requirements for the IT tooling

**ENISA IT** 

Validate usability from a maintenance perspective

EC ENISA

Involvement as key stakeholders of the project







This document has been produced by the Empowering EU ISACs Consortium under contract SMART 2018/1022 for the European Commission, in cooperation with ENISA. The reuse policy of the European Commission is implemented by the Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Except otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (https://creativecommons.org/licenses/by/4.0/). This means that reuse is allowed provided appropriate credit is given and any changes are indicated. For any use or reproduction of photos or other material that is not owned by the EU, permission must be sought directly from the copyright holders.