ENCIRCLE

EuropeaN Cbrn Innovation for the maRket CLustEr

D3.1 ENCIRCLE Cluster Dynamic Catalogue

Dissemination level

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PP	Project Private, restricted to other programme participants (including the Commission Services) – EU project	
RE	RESTRICTED, Restricted to a group specified by the consortium (including the Commission Services) – EU project	
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5	Tecnoalimenti (TCA)	
6	Wojskowa Akademia Techniczna (WAT)	X
7	European Virtual Institute for Integrated Risk Management (EU-VRi)	
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Executive Summary

This document is the description of the first version of the ENCIRCLE cluster dynamic catalogue that ENCIRCLE will update twice a year.

The ENCIRCLE Dynamic Catalogue is a web portal with databases, networks, market place and different functions, that will support the project activity in an open, flexible and interactive manner.

The catalogue contains non-classified information about:
- Relevant needs and gaps (unclassified and not confidential information),
- CBRN technologies and tools description,
- Generic, dual and related non-specific CBRN products and technologies and
- a CBRN-related projects database.

It gathers:
- the current and urgent new requests (new threats, needs, solutions) resulting in potential procurement or future research and innovation depending on the timescale (announcement of opportunities or ideas competition),
- requests for information for capabilities (systems/technologies) from the users,
- technology push and information from the suppliers,
- recommended standardized interfaces along the end users' systems and integrating platforms general description,
- links to calls and CBRN oriented conferences and exhibitions,
- non-technological lessons learnt from EU projects (both ways),
- sources of funding and procurement agencies,
- updated information on EU and national instruments, and
- cluster business discussions and main results.

It provides registration and support to the two ENCIRCLE communities: the Practitioners and Customers Community and the Technological and Industrial and Community which are the main users of the dynamic catalogue.

An advanced search engine facilitates navigation through the catalogue, and secure networks support the two communities' exchanges.

The catalogue recommends, among other functions, the list of (technology) gaps and needs, among which the priority research and innovation topics for the future CBRN security calls, in particular the SEC 05 Part b projects, can be selected to let the suppliers orientate their R&D activities.

The first version of the catalogue will be available on-line in June 2017 at www.encircle.eu.

This deliverable includes the first:
- dynamic catalogue functions descriptions,
- databases structure,
- registration, access and use description,
- risks and mitigation of risks.

All the suppliers and SMEs registered in the EDEN Store (supplier platform and SME platform) that already accepted to communicate their information to be used in ENCIRCLE will join the new community with a new login and password.

Their EDEN Store registered data will be transferred in the catalogue, ready for the suppliers to update them with recent information.

D3.1 Public deliverable

The main public deliverable of the dynamic catalogue is the portal itself, operational mid-June 2017, with different levels of details and information for the registered members of the communities and non-members. It is associated with the executive summary of this deliverable.

In its first version, delivered in June 2017, it includes the information provided by the EDEN partners, the suppliers and the SMEs that allowed the ENCIRCLE consortium to use their data, plus some additional needs and gaps identified and gathered in 2017:
- 214 Practitioners and Policy makers descriptions,
- 33 Main Needs,
- 321 Gaps (CBRNe specific and related),
- 12 Large Supplier descriptions (including RTOs),
- 175 Large Suppliers Tool descriptions,
- 58 SME descriptions,
- 69 SME Tool descriptions.

Table of Contents

1   ENCIRCLE Dynamic Catalogue general description

1.1   Framework and process

The ENCIRCLE dynamic catalogue is a framework and a process based on a sustainable and secure web-portal and databases supporting:
- the ENCIRCLE catalogue creation and update,
- community networks and
- the ENCIRCLE "market place".

It is benefiting from EDEN experience to be simple and user friendly.

It is based on:
- Interactive improvement ("crowd sourcing", after validation):
  Communities members will fill in their relevant information to be validated by the consortium and contribute to a living and reactive catalogue.
- Info push to registered members according to their profile,
- A search engine.

All these functionalities are using the improved EDEN functional & technical taxonomy (including human and social sciences functions).

The catalogue filling will result in particular in the list of (technology) gaps and needs, among which to select the priority topics for the Part b calls, along the long-term roadmap established by the project.

A formal update will be issued twice a year, after the project workshops.

While the public website will include only public information, the catalogue will include restricted areas and information such as:
- Users' details,
- commercial and performance information if indicated by the suppliers (restricted information on maturity etc), evaluations (technology performance, tool maturity, project monitoring results…).

The evaluations on the catalogue information provided by suppliers or users when deemed useful to verify the content, will be subjected to independent review by the Consortium. The check may be performed by subject other than the supplier, e.g. a Consortium member.

The access to this restricted information will require registration and authorizations delivered by the consortium upon the catalogue users' profiles.

For the communities' networks and the "groups" created by community members, participation for authorized catalogue users will be based upon group's acceptance (similar to the LinkedIn or Facebook principles).

A summary of the main information, including the topics recommended for the Part b calls will be made public on the catalogue as well as general interest information.

In order to disseminate widely these information, the public website will point to the catalogue and vice versa (with links on both sites).

1.2   General functioning

The dynamic catalogue is based on a regularly updated "tools" (technologies, products, systems…) and projects database including only non-classified information.

The database structure is defined along the EDEN CBRN related "tool" taxonomy (improved from the STACCATO previous project), that will also be improved during the ENCIRCLE project if and where needed. The current content of the taxonomy is provided in Annex.
It includes different levels from doctrines and scenarios, to large systems, and includes in particular standards and interfaces.

A categorization of the dynamic catalogue users has also been established (more detailed than the EDEN previous one), as well as for needs, gaps and priorities.

This approach allows to use a user-friendly search engine with various levels of details to identify tools responding to specific needs, suppliers, users, etc and create links in the ENCIRCLE market place.
It is benefiting from information filling from the communities' members, after registration, access to the catalogue and validation by the consortium upon user profile (from public level to consortium partners level)

The market place doesn't include commercial information nor functionalities. It creates links and provides targeted information.

It is based on an E-commerce and CRM (customer relationship management) like functioning (including fora & networks), with collective inputs and results moderated and validated by the consortium.
Users and providers of information are the members of the
   - Technological and Industrial Community (including Part b projects partners),
   - Practitioners and Customers community,
   - and the consortium partners.

The catalogue users' registration must be approved by the consortium (except for public info for which only a valid name and e-mail are required). The registration approval will be governed by criteria set forth by the Consortium.

It is associated with profiles corresponding to
   - Different levels of details and confidentiality,
   - Different authorizations of connections to other catalogue users,

- Offering a personal space for each user: allowing to update specific data and to receive targeted information.

In the first version of the dynamic catalogue, two levels of profiles will be implemented in each category, in order to validate the efficiency, benefits and drawbacks of this approach: full visibility and limited visibility.
"Non-authorized" users will only access the public information.

For projects, including SEC 05 Part b RIAs (Research and Innovation Actions), that accept to exchange information with ENCIRCLE to be monitored, the catalogue will implement a strict management of the confidentiality in terms of Intellectual Property Rights and agreements.
Only consortium members having signed the specific articles of the Grant Agreements after the project selection will have access to the project details provided by the relevant consortia.

The catalogue networks will support the creation of users' "Groups", similar to B2B (business to business), B2C (business to customer) or C2C (customer to customer) links, upon the only decision of the members of the groups.
These groups will decide upon the level of exchange they accept to implement.

1.3   Legal and ethical issues

Data will be collected and stored throughout the process of developing and maintaining the Cluster Dynamic Catalogue.

As the ENCIRCLE dynamic catalogue uses and stores personal and sensitive information, it is hosted in servers located in Sophia Antipolis in France.

The database elements will be declared at the CNIL, French agency of information and liberty, managing the rules for personal and "customers" data and operated in line with its requirements.

The catalogue will be ethical by design, respecting the level of authorization allowed by the information owners when filling in the databases.

It will be ethically checked during the project, under the responsibility of UCSC, which will provide guidance and further recommendations when required and will be fully available for requests of support.

In particular, it must be ascertained if the collection and storage of data related to the catalogue(s), networks/communities and marketplace require notification by the competent Data Protection Officer or obtaining the authorizations from Data Protection Authorities according to European standards (Directive 95/46 and Regulation EU 2016/679, the new

Regulation applicable as of May 25, 2018) and national laws. To this end it will be necessary to identify the competent Data Protection Officer.

2   ENCIRCLE Dynamic Catalogue main functions

The main function of the ENCIRCLE dynamic catalogue are summarized in the figure below, as well as the main exchanges, contributions and feedbacks (with arrows between the different parties involved):

ENCIRCLE Consortium Proprietary Information
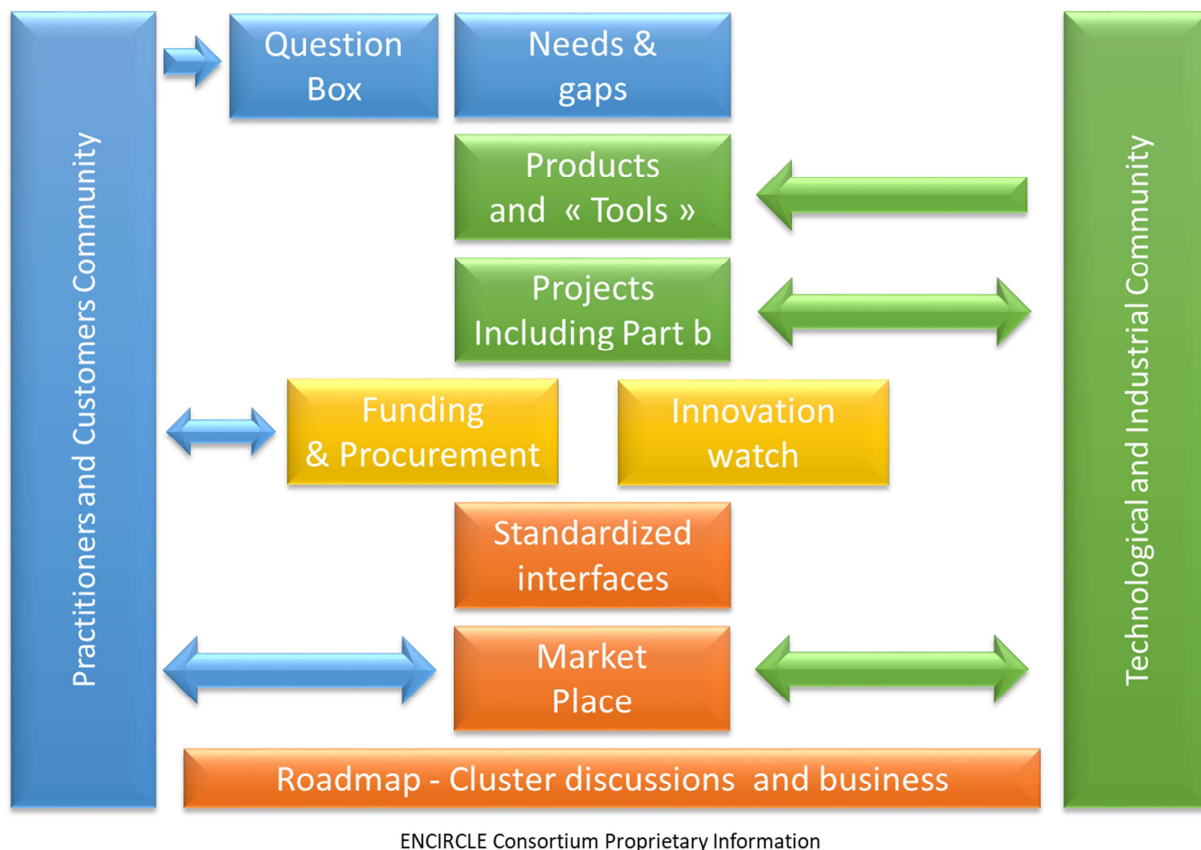
Figure 1 – Dynamic catalogue main functions

The two communities can communicate with the consortium and between each other at different levels, mainly through the networks and groups, and in the market place.

2.1   Registration and access

In order to access the non-public catalogue information, each applicant must fill in an on-line "questionnaire" that is checked and validated by the consortium before allowing access and defining the relevant user profile offered to the applicant.

For all personal data collected and processed (e.g. contact information) informed consent shall be obtained.

A waiver for the use of data and personal data (e.g. contact information, pictures, logos) in any publication or release of the Consortium (e.g. flyer, catalogue, press release, webpage etc.) shall be obtained. This should specify the consent for the specific use(s) and waive any IPRs for the use of logos, pictures etc. and provide confirmation of the authority to use these and to associate the affiliation (e.g. the Company or other supplying institution) with the catalogue.

These steps should be taken also for data of suppliers originating from the EDEN SMEs and suppliers (or SMEs and suppliers from other sources), even if they have provided the EDEN Consortium or other sources their consent"

2.1.1   Technological and Industrial Community member registration and access

The Technological and industrial Community member registration will be conducted when registering at least one "tool", whatever its nature in the catalogue.

Registration of a supplier or laboratory without providing information on their activities and contributions will not be accepted.

The tool description will be used as questionnaire for registration.
The questionnaire is described in § 4.2, below.

It will in particular help identifying what are the technologies and what are the possible "integrating platforms" that could be connected and integrated later on in the development process.

The SME/Industry/laboratory will be registered with its contact points within the overall description.

2.1.2   Practitioners and Customers Community member registration and access

The questionnaire for the users' different categories is provided in § 4.3.
It includes practitioners, decision and policy makers and customers.
It can concern an organisation or an individual (expert of specialist).

It offers the possibility to declare or reject interest to participate in users' groups, and to define possible networks of interest.

2.1.3   Project registration and access

Part b projects will have to register and agree in their grant agreements to exchange with ENCIRCLE.

Based on goodwill, other projects are welcome to join the community and exchange information on a bilateral basis, allowing to register, facilitate exploitation and dissemination of their results, and to register their partners (users or suppliers).

The questionnaire is provided in § 4.5.

2.2 Networks and groups

In the catalogue first version (to be delivered mid-June), only the registration and declaration of interest for creating or participating in networks and groups will be implemented.
The networks will be fully operational for the first workshop (before September).

2.3 News and conferences

Public news will be displayed on the front page of the portal: it will contain general information on the project workshops, other conferences or events, general information on the project when available, etc, as decided by the management board and the dissemination task leader. Registered members of the communities will receive these information after their registration.
More specific and targeted information will be pushed to registered catalogue users (to the two communities) according to their profile under subscription conditions defined at their registration.

2.4 Catalogue function

The catalogue concerns the "tools" and the projects (sets of tools).
The tool and project description requires identical information to be registered.
They will be updated during the course of the project for what concerns the tool development, progress, tests etc.

Their association with needs and gaps may be refined and detailed by either the consortium partners or the suppliers following in particular the workshop results and recommendations.

2.4.1 Tool (technology, sub-system, system…) description

The product/tool "catalogue" to be filled in by the Community members includes:
- CBRN relevant technologies and tools,
- Generic, dual and non-specific CBRN products (including systems) and technologies.

It includes non-technical tools such as lessons learnt, scenarios, doctrines, procedures, human and social sciences.

It is classified along the levels and elements of the EDEN taxonomy (depending on the user profile), and includes also:
- functional description, performance, maturity,

- associated needs or gaps,
- unique points of contact and experts.

Detailed description is provided in § 4.2.

2.4.2   Project description

It is filled in and updated by the Consortium and the Community members and includes:
- CBRN project, main information and
- CBRN related projects information.

Detailed description is provided in § 4.5

2.4.3   Specific case of the SEC 05 - Part b projects and related technologies

The main description for each expected result is identical to other projects description.
It will include more details after agreement with each concerned project.
This section will be implemented in early 2018 after the selection of the first Part b project.

2.5   Needs and Gaps

The needs and gaps will be established upon the results of previous and on-going projects such as EDEN and will be a key result of each ENCIRCLE workshop.
User groups and networks can also contribute directly in particular through the question box.

The gathering and summary will be established by the consortium.
It will contain only unclassified and not confidential information.

The needs will be gathered with and from the Communities;
The main results summary will be provided to the communities though the catalogue.

The description is provided in § 4.6.

2.6   Question box

For urgent new requests (new threats, needs, solutions), users, and eventually in some exceptional cases suppliers, can ask specific questions in a dedicated question box.
The information is displayed for analysis as soon as possible to the consortium that will decide upon the kind of response to provide, depending on the urgency and the nature of the need:
It can result in a potential procurement, announced in the market place, eventually towards specific suppliers in case of confidentiality conditions,
or in future Research & Innovation recommendations depending on the timescale.

It can take the form of an announcement of opportunities or an idea competition to be managed by the user(s) that made the request.

The format and description will be as simple as possible: direct questions, with conditions of confidentiality or any kind of restrictive conditions if needed.

2.7 Market place

The first version of the market place will be operational for the first workshop.
It will be based on the use of the search engine with requests defined by the different elements of the questionnaires and descriptions.

It will include:
- Requests for information for capabilities (systems/technologies…) (from the users),
- Technology push and information (from the suppliers),
- Identification of possible "compatible" integrators and technologies,
- Links to calls and CBRN oriented conferences and exhibitions.

2.8 Integration and "integrating platforms"

Integrating platforms or connectable technologies will be identified in the "tool" registration, with possible "confidential" information to be communicated only upon request on a case by case basis.

The information will be provided as restricted information on detailed opportunities for Part b projects or other willing projects or tool suppliers, and only upon request of platforms owners if willing so.

2.9 Standards and standardized interfaces

Standards and standardized interfaces are part of the tool taxonomy.
They are also a specific category of "tools" that can be used as recommendations to the suppliers.

A summary will be required for each tool description.

It will be recommended by ENCIRCLE for Part b and other willing projects in case of candidate integrating platforms or connectable tools other suppliers.

It includes also the interfaces and standards of "legacy systems" (with a system general description), including those operational in the end user facilities, in case users accept to provide them.

They include also interfaces and links to CBRN testing and training centres.

2.10 Innovation watch

The section of the dynamic catalogue will be operational after the first project workshop.
It will include also contributions from the Communities (in particular the academic and industrial members).
The main general results will be summarized and made available to the catalogue users.
It may include dedicated support to the Part b and other willing projects upon request to the consortium.

2.11 Funding, procurement and business

A section of the catalogue will include regularly updated information on EU and national instruments such as DG ECHO projects, CBRN Centres of Excellence, structural funds…
and instruments of other procurement or innovation support agencies.

It will be operational at the first workshop.

Contributions from the funding or procurement agencies are all expected, in particular through the CoU institutional members.

2.12 Roadmap summary

The catalogue will include the following topics contributing to the project roadmap:
- non-technological lessons learnt from EU projects (both ways),
- contribution and comments from the Communities,
- a summary provided to the Communities.

It will be available for the first roadmap preparation and release.

2.13 Cluster Business discussions summary

This section of the catalogue will be operational after the first Part b RIAs selection in 2018.

It will include:
- a general reporting on the numbers and categories of SMEs and integrators involved, respecting IPR and confidentiality (anonymously if needed, with general statistics, etc…)
- a general assessment and feedback on the success of the business deals implemented whilst respecting confidentiality (lessons learnt mainly), likely to happen only by mid to end 2018.

2.14 Other functions: questionnaires summary…

The catalogue includes a "repository" area, including:
- the detailed questionnaires for consortium only (project repository),
- detailed analysis results for authorized catalogue users and

- a synthesis provided to all catalogue users.

Its structure is free and simple, and will be adapted to each category of questionnaires.

3   SEC 05 Part b and other projects analysis and monitoring

The project section of the catalogue will be fed with past, on-going or planned projects relevant to the CBRN field.

It includes:

- a general project description, and more important,

- a product and project results summary and analysis by the ENCIRCLE experts especially for projects that will accept to exchange information with ENCIRCLE (Part b but not limited to).

As many as possible existing and planned products from projects in the CBRN field will be registered and monitored, with the support of the Technological and Industrial Community.

It represents a large part of the activity of the catalogue and will require the support from the partners of the consortium, especially during the relevant workshops to address the overall scope of each project including in terms of users, partners or "competitors".

The first project results that will feed the catalogue are the main EDEN results, in particular from the EDEN platforms.

For the specific case of the Part b projects monitoring:

It will be achieved in details on a case by case basis with each project with the main ENCIRCLE partner experts, based on the exchange of information agreed in the agreement with the Part b project consortium.

The monitoring will be conducted for all the Part b projects and for other willing projects.

The objective is to assess the results achieved and difficulties, contribute to the EU competitive and technological positioning of the technologies developed and support integration and/or future development and procurement in line with the market needs.

Specific expertise will be called in the consortium, if needed with specific NDAs.