



CREATIF

Network of Testing Facilities for
CBRNE detection equipment





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-  Background on CREATIF
-  CBRNE and DIM
-  Strategy for Developing an European Certification Concept for CBRNE
-  Next Activities

Motivation of CREATIF:

*Reliable operating detectors and devices for the **d**etection, **i**dentification and **m**onitoring of **c**hemical, **b**iological, **r**adioactive and **n**uclear materials can reduce or even prevent accidents and terroristic attacks with hazardous or dangerous substances respectively!*

Destination of CREATIF:

Establishment of an European network of manufacturers, test centers (certifiers), end-users, decision makers and other stakeholders which have interest in setting up a future European Certification System on CBRNE for the global market.



CREATIF Partners	Initials	Country
Austrian Research Centers GmbH – ARC	ARC	AT
DGA Maîtrise NRBC – Site du Bouchet	DGA	FR
Cotecna Inspection S.A.	COT	CH
Bundesanstalt für Materialforschung und –prüfung	BAM	DE
DGA Land Systems Department Protection and Survivability	DGA	FR
Totalförsvarets Forskningsinstitut, Swedish Defence Research Agency	FOI	SE
Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek TNO	TNO	NL



EU funding: 831.300 Euro

Starting date: 02/ 2009

End date: 07/ 2011

CBRNE & DIM



Chemical Weapons

Nerve agent (Sarin), **Blistering agent** (mustard sulphurous gas) **Asphyxiating agent** (phosgene), **Psychotomimetic agent** (LSD), **Incapacitating agent** (tear gas); **possible new agents**: research on new ways of affecting the human brain to cause aggressiveness, sleepiness, fear or other emotions (**bioregulators**).



Biological Weapons

biological agent that causes disease, such as bacteria, viruses or toxins; diseases might normally lead to death while others might incapacitate their victims or lead to changes in behaviour.



Radioactive Material / Nuclear Weapons

explosive device that derives its destructive force from nuclear reactions, either fission or a combination of fission and fusion. Dirty bombs – devices that disperse radioactive material. Terrorists could also attack nuclear facilities or nuclear materials in transit.



Improvised Explosive Devices (IEDs)

bomb with HME,biological, chemical sources and ..

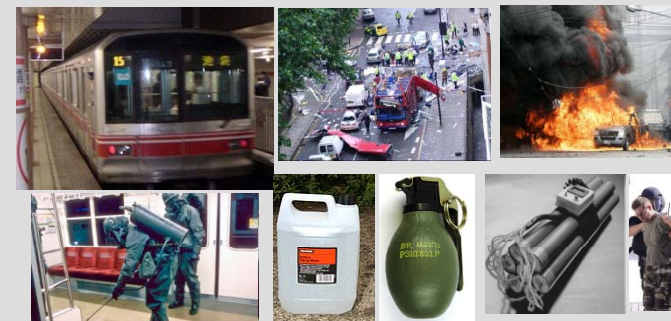
CBRN

- some nations and some non-state actors continue to acquire **Chemical Biological Radiological and Nuclear (CBRN)** capabilities.
- instances of terrorist and other ad hoc groupings embrace CBRN technologies as a powerful means of pursuing their interests.
- global industrialisation opens the wider possibilities of accidental release or deliberate misuse of **Toxic Industrial Materials (TIM)**.

Weapon of Mass Destruction (WMD)



Terrorism by intentional release or dissemination of CBRNE



Gas attack

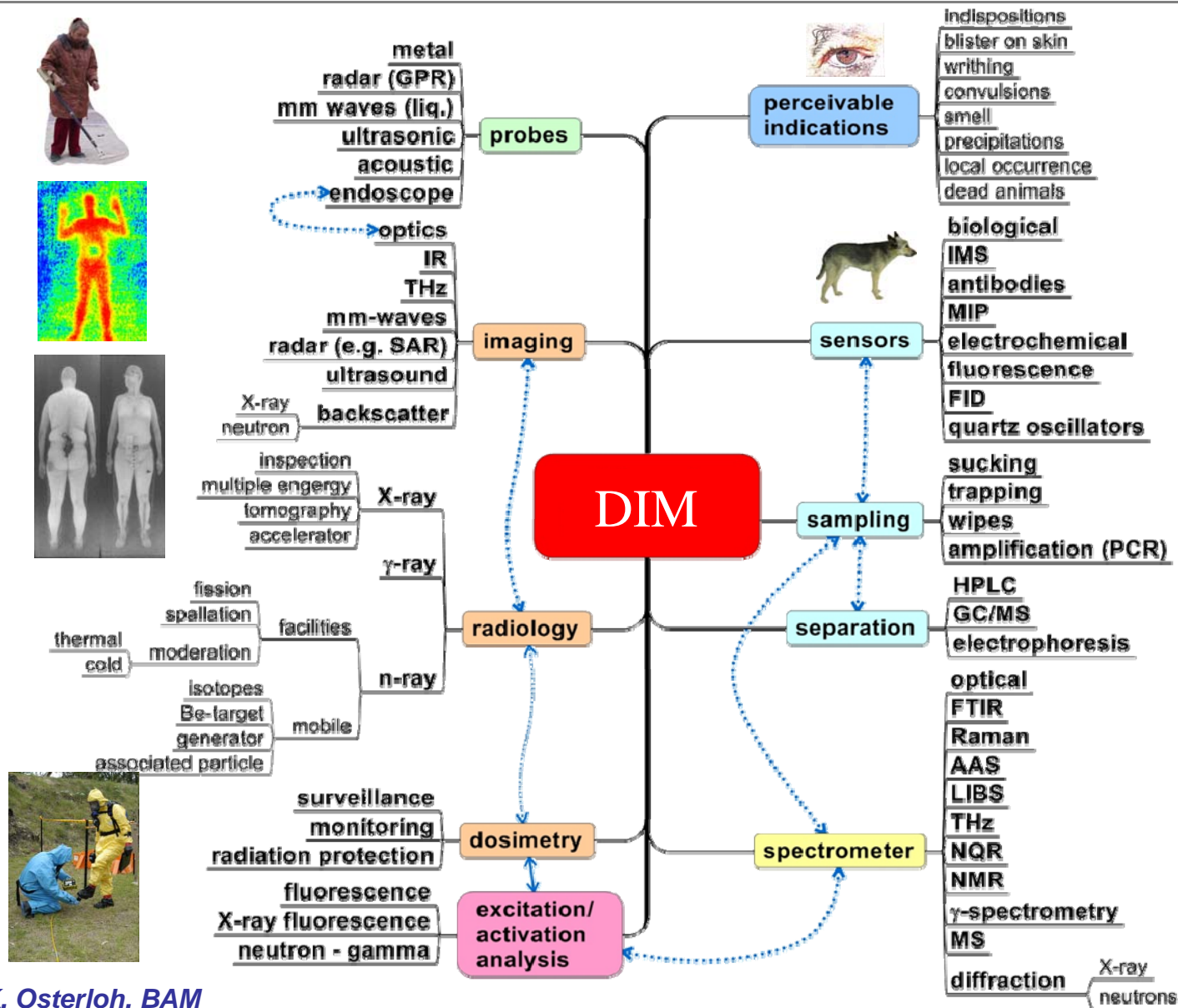
H₂O₂

VBIED & IED attacks

Toxic Industrial Materials (TIM)



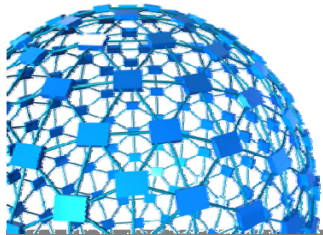
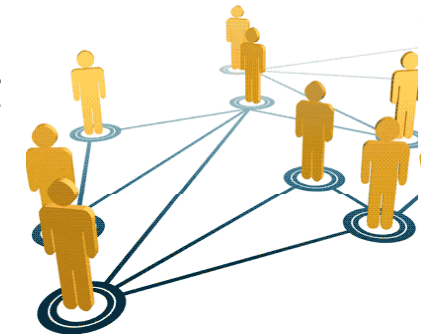
Sensor Systems and Devices for DIM



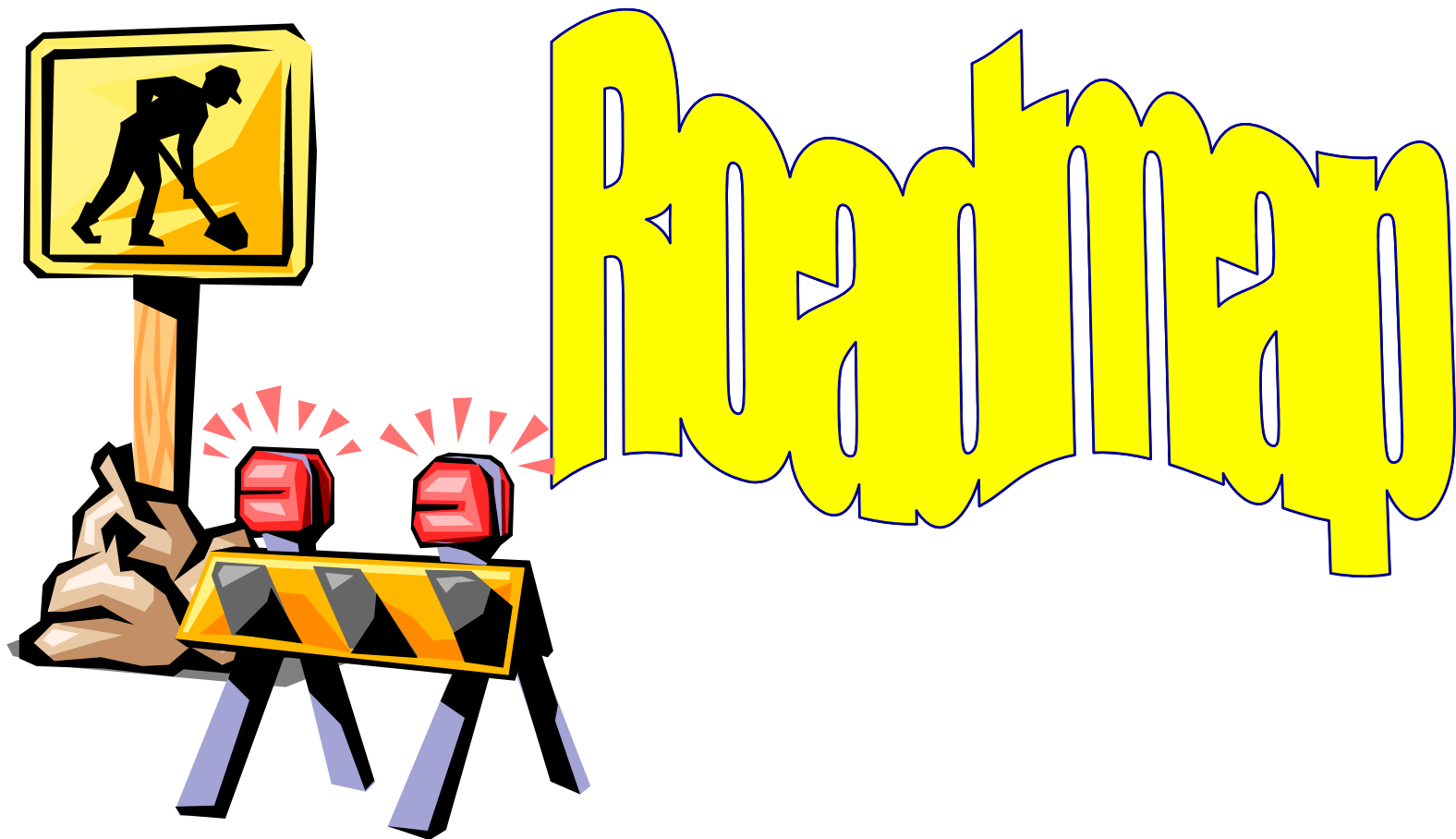
Source: K. Osterloh, BAM

How to come to the network ? (Objectives of CREATIF)

- provide databases on test facilities & portfolio of expertise
- offer a forum to involve decision makers, end-users and other stakeholders (industry, EU-bodies, CEN) into the discussion on the future CBRNE Certification System
- support user decisions and product / service development
- working on harmonize testing (examples)
 - initiative toward harmonized EU-wide standards
 - encourage EU-wide uniform technical level of testing by best practice, harmonization of protocols and quality assurance
- creation of a roadmap for future CBRNE Certification System
- define minimum requirements of testing facilities and service providers
- generate certification strategies for facilities, service providers and devices
- amend testing procedures
 - human factors
 - operational issues



CREATIF designs strategies, preconditions and rules for an internationally recognized certification system, which in the future can provide reliable data that any CBRNE related device or professional service, complies with stated specifications and/or standards.



The European CBRNE Certification

Certificates issued on the basis of the **European CBRNE Certification** demonstrate the performance quality of CBRNE products according to European and International standards, protocols and European Directives.



The **objective** is to build up customer confidence by levelling the competitive playing field for all manufacturers and by increasing the integrity and accuracy of the DIM performance ratings (properties).



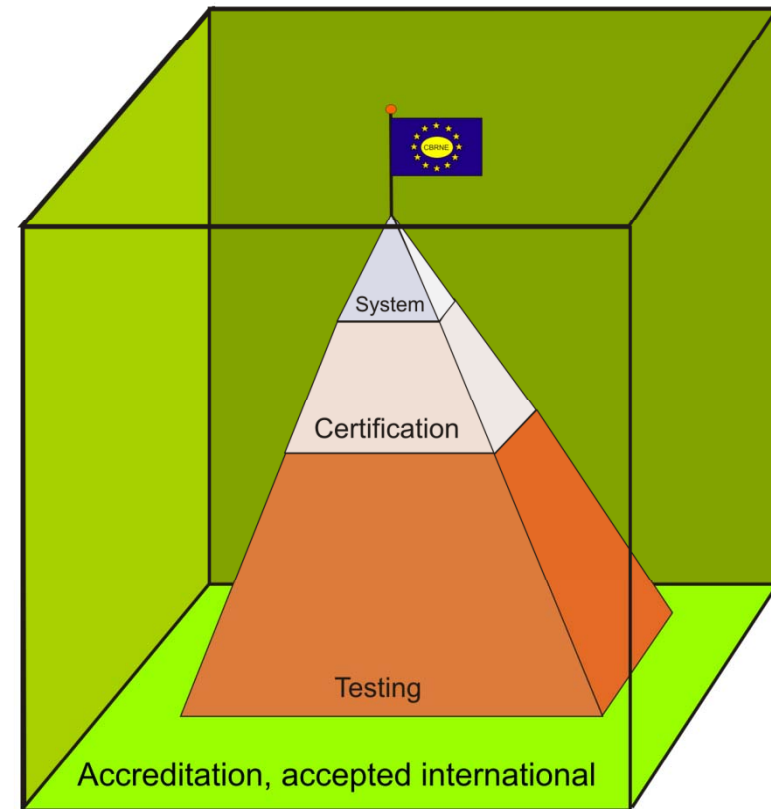
It should create a common platform for the **Manufactures** where competition can take place on comparable basis of performances, for the benefit of specifiers and end-users.



It give the **End-User** the reassurance that they are purchasing quality products that are working in conformity with the specified dimensioning and properties.

The Laboratories of the Future European CBRN Certification System

The Future European Certification System for CBRNE DIM products requests accreditation of the **testing laboratories and certification bodies** according to EN ISO IEC 17025 standard. Selection criteria are the testing capacity and dimensions but also the experience of the personnel.



Testing performed by a professional partner is the basic requirement of Certification.

The Logo of the Future European CBRNE Certification System



The **European CBRNE Security Label** demonstrates that products have been tested and certified independently and that they have been accurately rated.

Specification sheets, literature and advertising, should display the certification symbol and the following statement:

*"(Name of Company) participates in the European CBRNE Certification System for (designation of the relevant family of products); the certified data of certified models are listed in the **EUROCBRNE Directory**."*

Future European CBRNE Certification Council

The European Certification Council for the CBRNE area is the consultative body where Manufacturers, Certifiers and other stakeholders discuss common strategic issues concerning European Certification on CBRNE on global market.

It gives advice

**on development,
strategy and
policy matters**

to European CBRNE Certification Association

and makes appropriate *links to the EC policy and regulation authorities.*

European CBRNE Certification Association

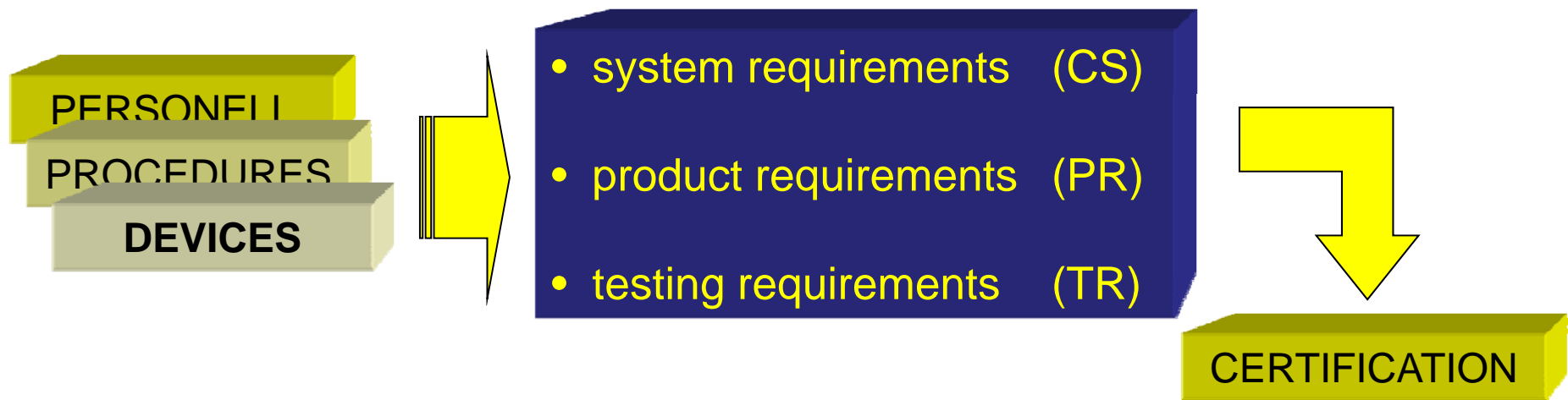
The European CBRNE Certification Association is active in the area of CBRNE. It operates an office for the European CBRNE Certification System and represents the viewpoint of third party certification. It publishes for each Certification Scheme a body of permanent and operational responsibility that governs the functioning of the scheme.

The tasks of ECBRNECA:

- to facilitate the certification activity of its members
- to promote third party certification based on European standards
- to secure the necessary feedback from certification to standardisation
- to secure openness and transparency in the European certification schemes
- to protect the interests of participating European certification schemes,
- keeping into account the interests of manufacturers, users and consumers
- to monitor the use of Schemes on the market
- to co-ordinate European certification schemes with international schemes for the benefit of European industry.
- to carry out all objectives for further realisations of the aims of the association.

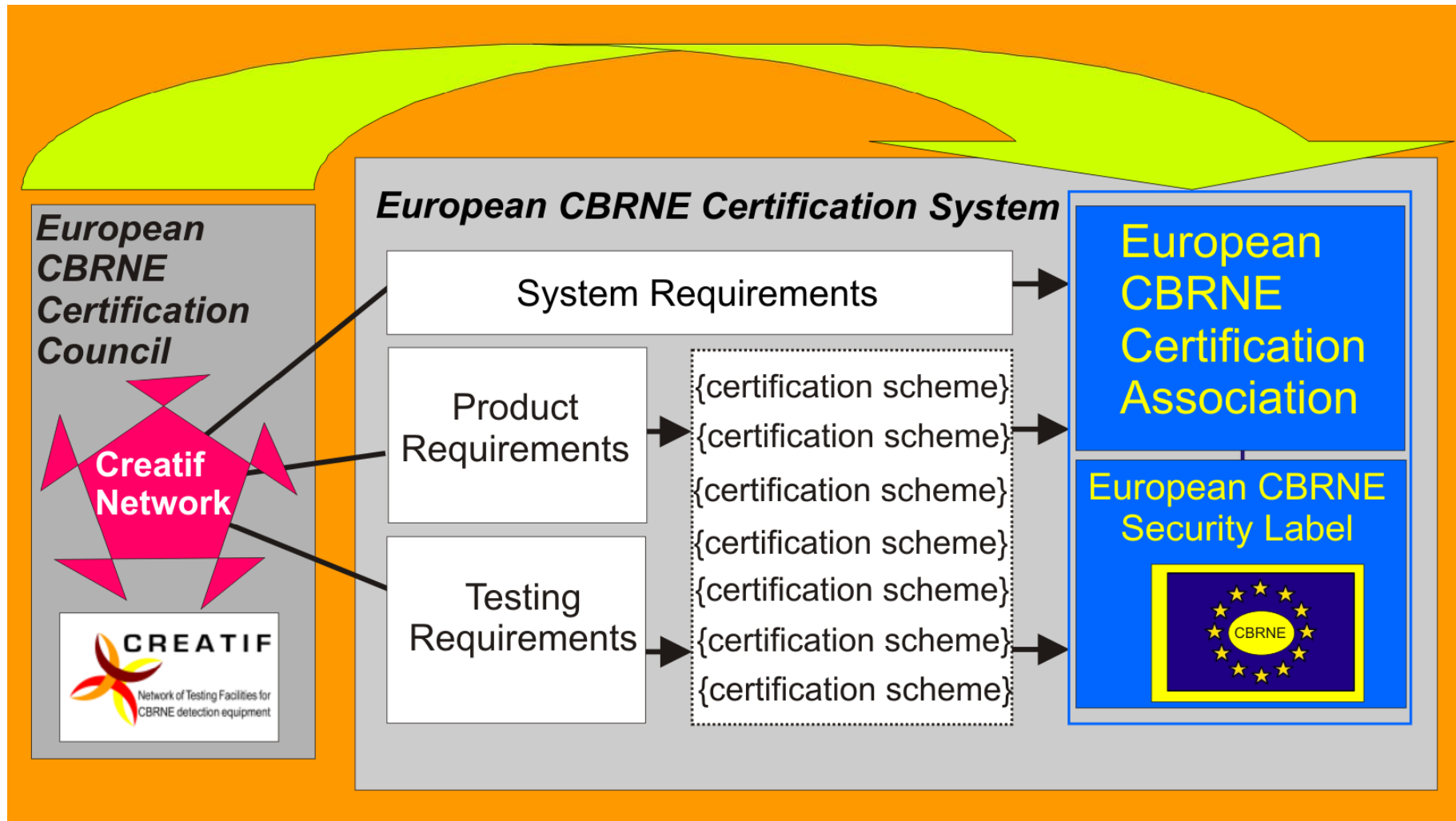
THE CERTIFICATION of the CBRNE SYSTEM

- (I) shall reach Europe wide acceptance of test reports and certificates
- (II) Therefore, expectations of stakeholders as well as legal requirements, e.g. EC-Directives, shall be taken into account for the future system.
- (III) This applies to all elements of the system:



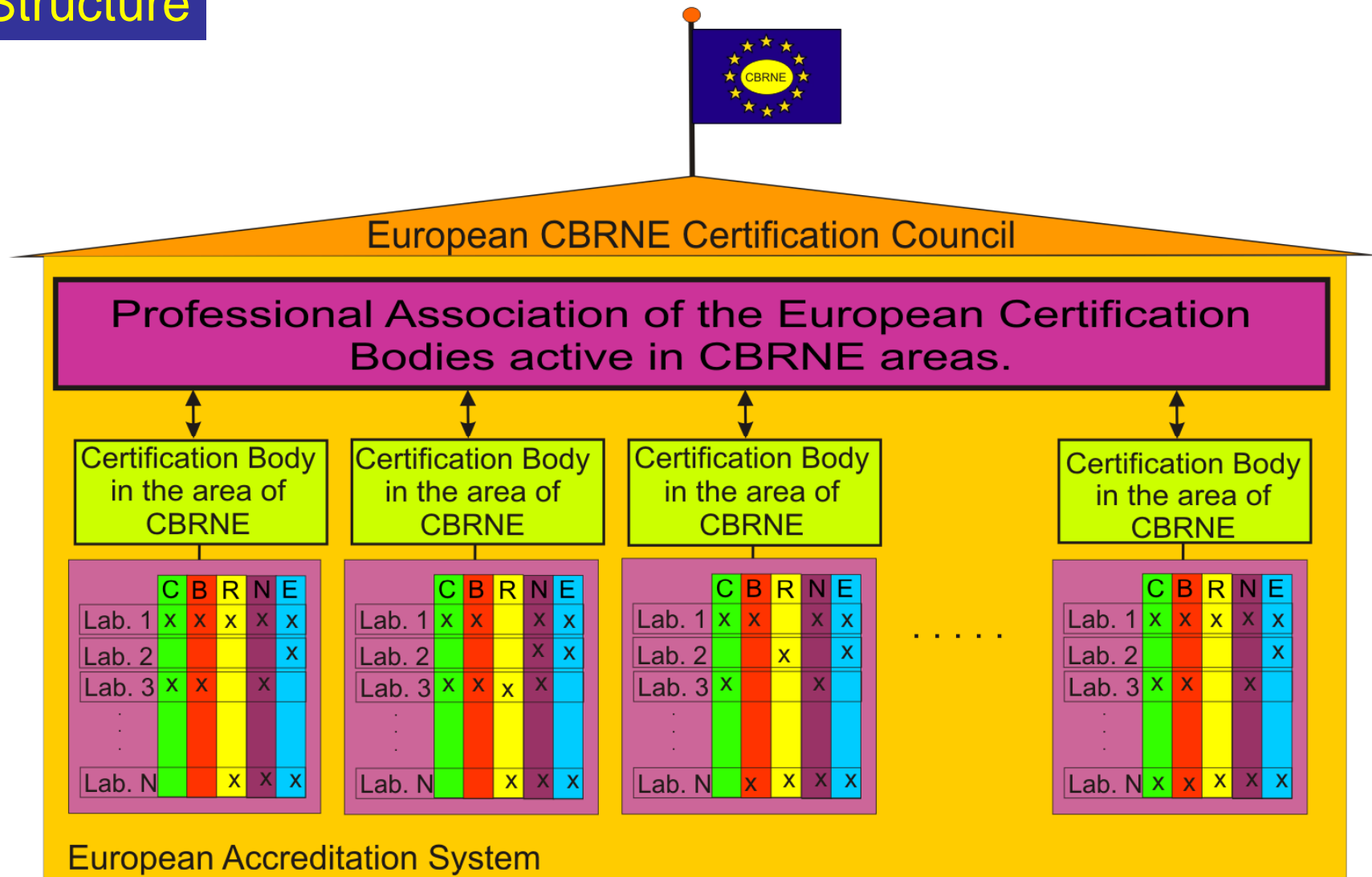
- (IV) Product related requirements for testing and the product itself are specified in individual certification schemes.

Development



European CBRNE Certification System

Structure



All interested parties can become a member of the network !

Function:

communication platform for

- *end users*
- *decision makers*
- *manufactures for CBNRE detectors and devices*
- *certifiers and other stakeholders*
- *people interested in discussing common strategic issues concerning a future European Certification System on CBRNE*

CREATIF – Workshop at BAM on the Development of an European CBRNE Certification System (5.10 & 6.10 2010 in Berlin)

The workshop is intended to

- Raise discussions on CBRNE Certification
- Hear your opinions on it
- Get first ideas that should issued and forwarded to the EC policy and regulation authorities
- Make contact between individuals
- Work together on the topic

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<http://www.creatif-network.eu>