

G-MOSAIC

GMES services for
Management of Operations,
Situation Awareness and
Intelligence for regional Crises

Project introduction
Luboš Kučera
Gisat

Project managed by
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G-MOSAIC

European Space Research
& Development



- G-MOSAIC is a **GMES Security Pilot Project** under the Seventh Framework Programme

EC 7FP: Theme 9\GMES

SPA.2007.1.1.02 B: Information services for Security related activities

- It aims to provide Support to the definition and implementation of **Security related Core Services**



figures

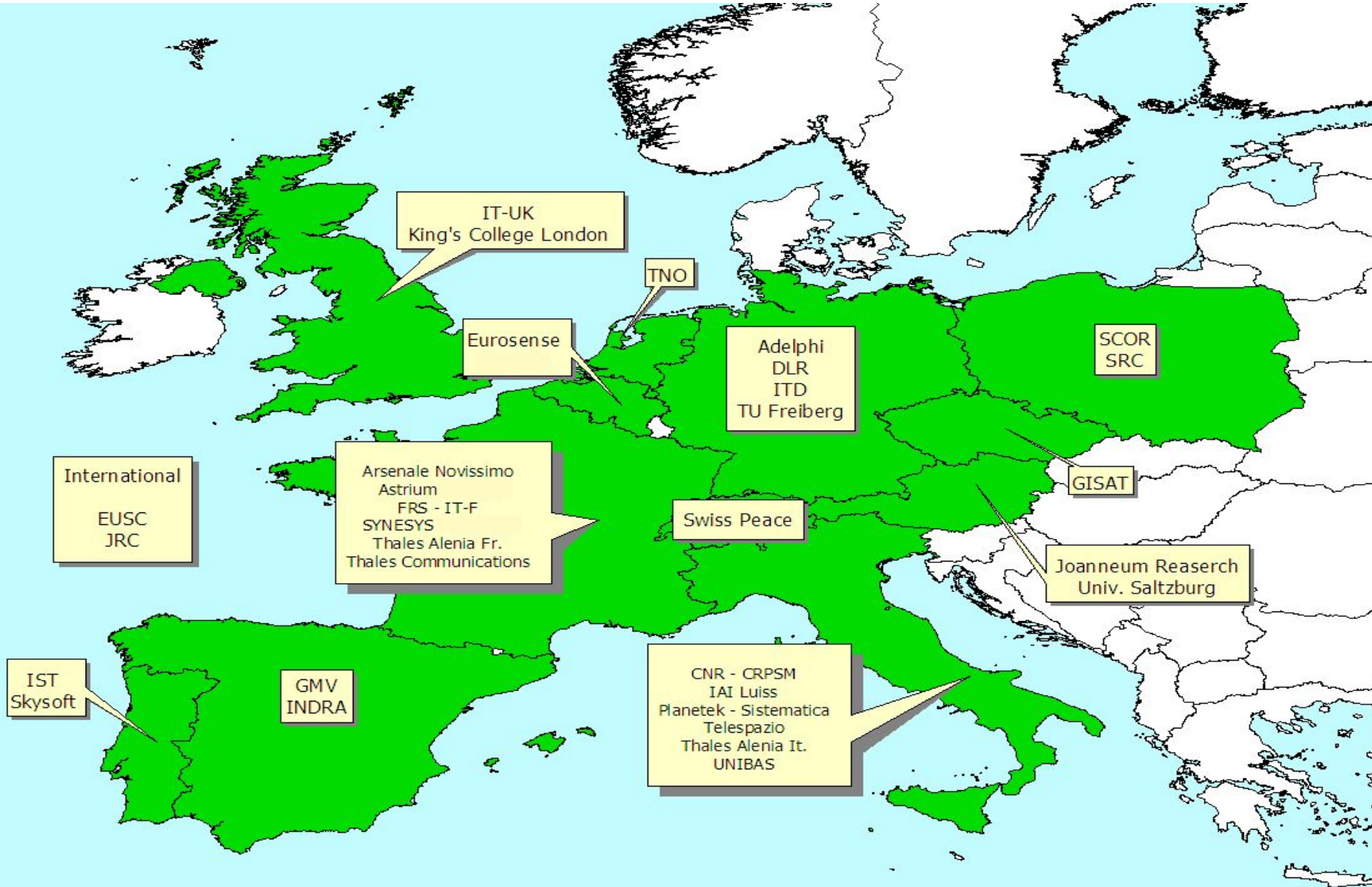
- Start date: **January 1st, 2009**
- Project Duration: **36** months
- Consortium: **36** partners
- Total Cost: **15** MEuro
- EC contribution: **9,6** MEuro

objectives

- **identifying and developing** products, methodologies and **pilot services** for the provision of geo-spatial information in **support of EU external relation policies** for Security related activities
- contributing to define and demonstrate **sustainability of GMES global security** perspective

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Partners



The main **expected results** of the project are:

- **New GMES services for security**
 - **Support intelligence and early warning**, with the objective to deploy and validate those information services that contribute to the analysis of the causes leading to regional crises
 - **Support Crisis Management Operations**, with the objective to deploy and validate those information services, that contribute to support the planning for EU intervention during crises
- **New users involvement**
- **Contribution to GMES sustainability**

- GMOSAIC Service Domains are characterised to deal with EU Security related to "**out of EU Area Crisis**"
- GMOSAIC Services Cases are characterised by **Security and Confidentiality requirements** and will implement specific end-to-end management of these aspects

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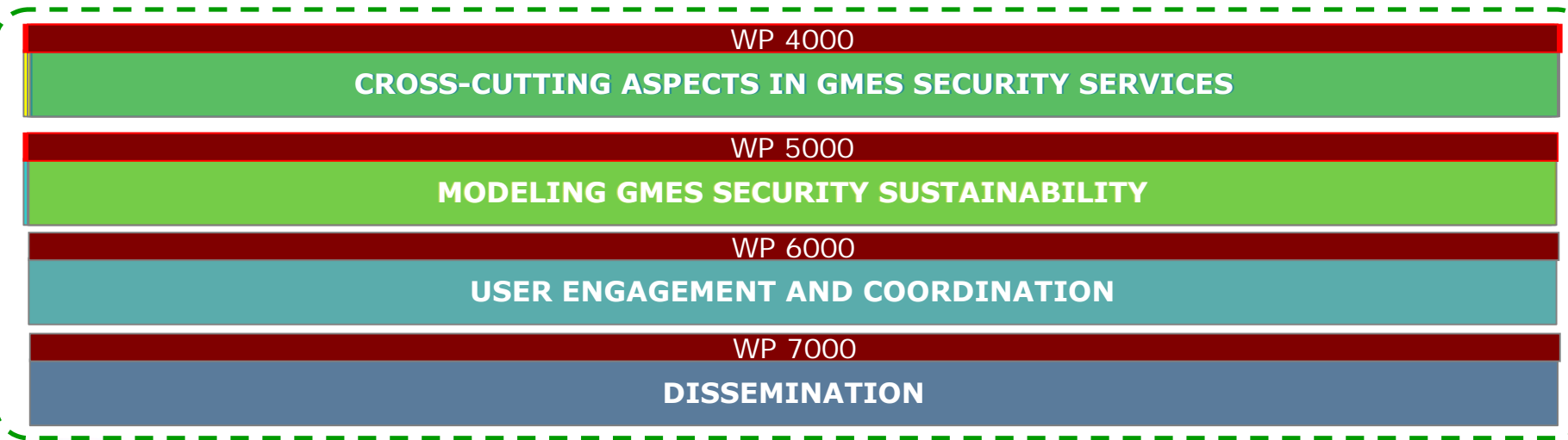
Work breakdown structure



Services



Cross-Mission Tasks



Within WP2000&3000 new services for security will be set up and deployed in their respective domains

Support to intelligence and early warning

Services supporting intelligence and early warning, providing information useful for the analysis of the causes leading to regional crises, potentially affecting other countries and rising up at global level

Support to crisis management operations

Services dealing with the crisis management operations, providing information supporting EU intervention during crisis, citizen repatriation, consequence mgt and reconstruction activities in countries affected by crisis

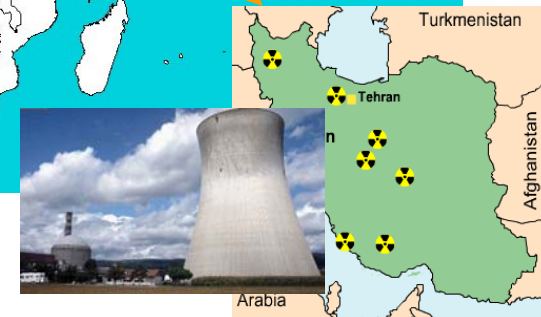
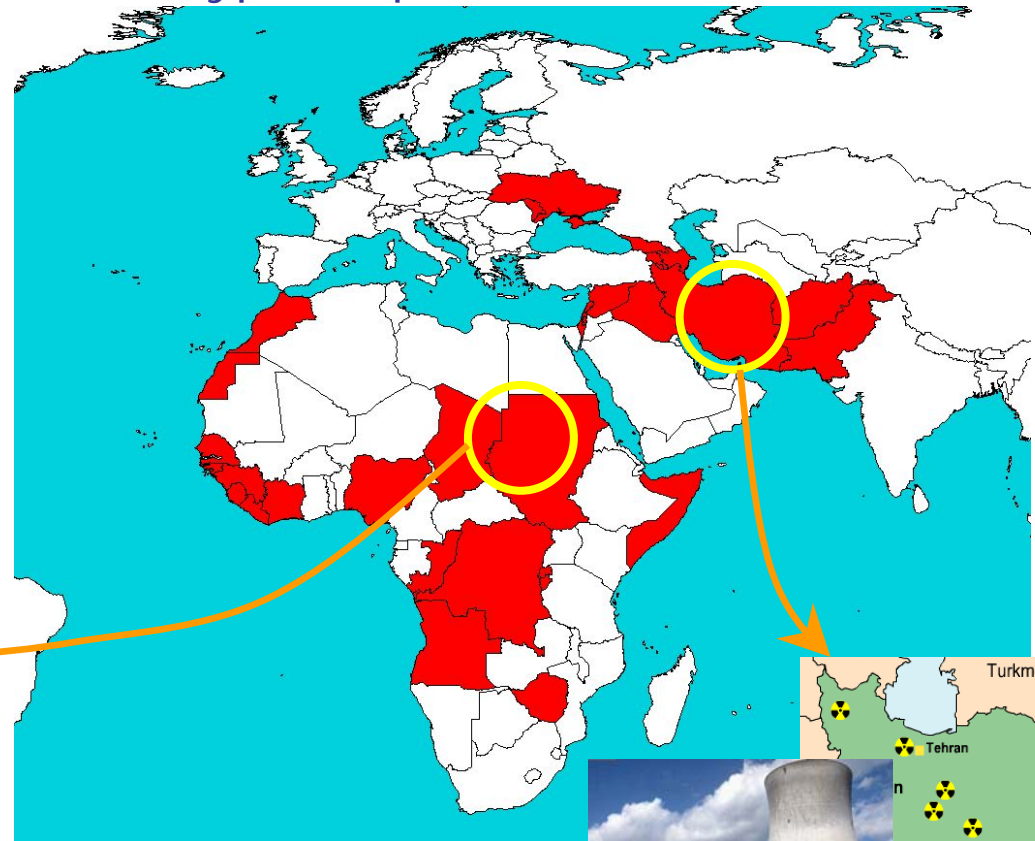
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Key concepts: service cases

Geographical scope of G-MOSAIC services will be targeted by defining Service Cases with the users.

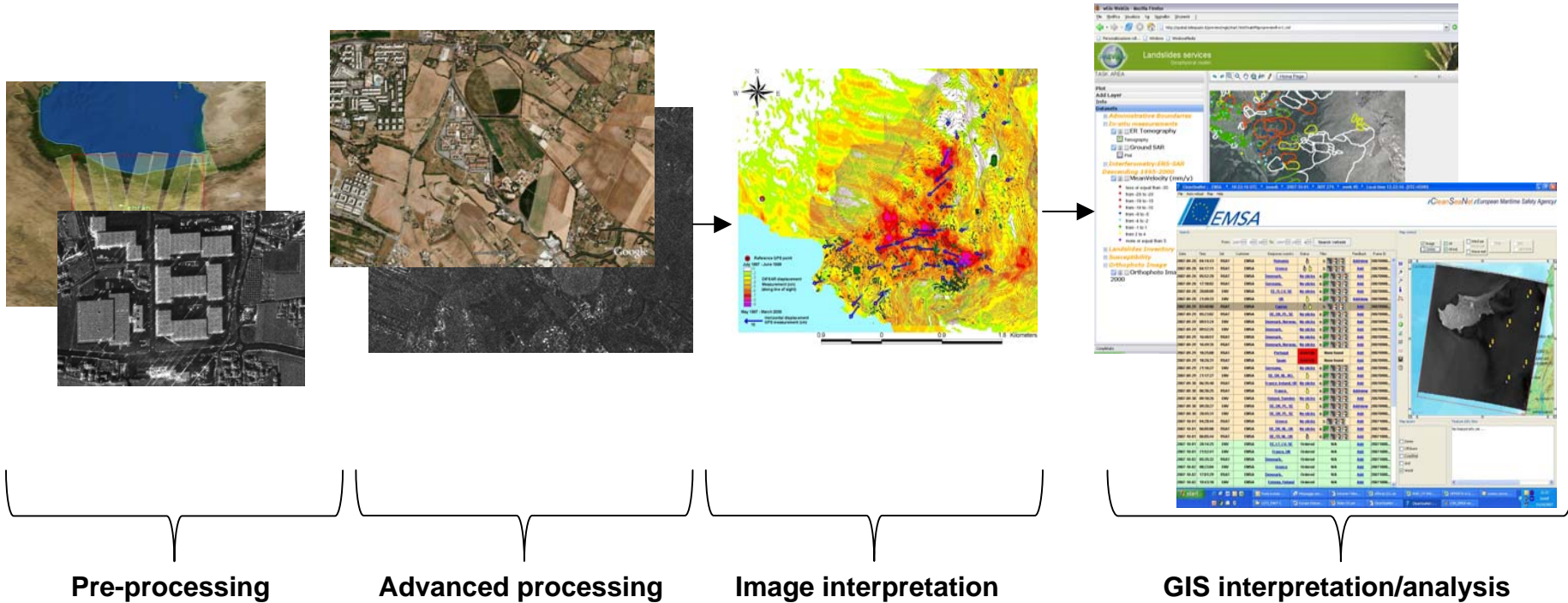
A service Case represents an example of utilization of one or more service chains in the framework of a typical operational scenario, characterized by:

- defined area
- security problem(s)
- user(s) involved
- reference policy
- ...



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Key concepts: service chain



A **service chain** is the technological implementation of a **methodology** defining relations through which **building blocks** are assembled to provide information in support of a thematic task.
G-MOSAIC will (re)use building blocks derived from existing (GMES/non GMES) projects (GSE, FP6...)

Crisis Phases	Thematic information	Service chain	
Intelligence & Early Warning	Non-Proliferation & treaties	<ul style="list-style-type: none"> · Monitoring of nuclear decommissioning sites · Continuous surveillance of nuclear facility · Peace accords and human rights 	
	Crisis indicators	<ul style="list-style-type: none"> · Exploitation of natural resources (ENR) · Population pressure (PP) · Land degradation (LD) 	
	Critical assets	<ul style="list-style-type: none"> · Critical assets monitoring · Critical assets event assessment 	
	Illegal activities	<ul style="list-style-type: none"> · Illegal mining · Illegal timber logging · Illicit crops 	
	Routes & borders		<ul style="list-style-type: none"> · Monitoring of military activities, border crossing and related infrastructure along the border
			<ul style="list-style-type: none"> · Long range migration routes & temporary settlements along the routes
	Preparedness for crisis	Contingency planning	<ul style="list-style-type: none"> · Contingency plan preparation
	Crisis		<ul style="list-style-type: none"> · Terrain analysis and mobility assessment (non permanent tasks)
		Emergency mapping	<ul style="list-style-type: none"> · Logistic and deployment operations
	Post-crisis & reconstruction		<ul style="list-style-type: none"> · Damage assessment for post-conflict situations, post conflict environmental assessment (jointly with UNEP DEWA)
Damage assessment		<ul style="list-style-type: none"> · Support reconstruction mission after conflicts 	



- **Definition of service scenarios with users**

Includes the identification of world critical areas, the definition of capability needs by the analysis of current available users capabilities, definition of type of information to be provided and format and the architectural solution for service cases operation.

- **Service case specification**

Includes the identification of service chains involved in the service case, the way to integrate them on a common platform, the definition of additional information content (expert analysis) to be added (and how), the definition of a service validation/appraisal plan

- **Operation of the service cases**

This task refer to the actual service deployment according to what designed and developed in the previous one

- **Validation and users feedback**

Includes the assessment of services effectiveness according to G-MOSAIC evaluation approach (product level/service level)

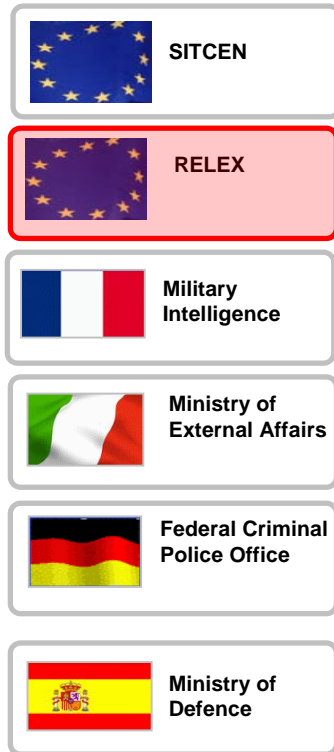
- **Training**

Training session for the users organized at the very beginning of the operational phases

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Geo-information request path

Users



Service Case



Service chain

Continuous surveillance of nuclear facilities
Monitoring of nuclear decommissioning sites
Exploitation of natural resources
Land degradation
Critical assets monitoring
Illegal Mining
Illegal Timber Logging
Illicit Crops
Monitoring of activities and border crossing and related infrastructures along the borders
Long range migration routes and temporary settlements
Long range migration routes and temporary settlements
Contingency plan preparation
Terrain analysis and mobility assessment
Logistic and deployment operations
Damage Assessment for post conflict situation
Support reconstruction missions after conflict

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Target users community

Nationality	Domain	Name	Description
	Civil	DG RELEX	EU External Relation Directorate General
	Military	EUMS	EU Military Staff
	Civil	SITCEN	EU Joint Situation Centre
	Civil	DG-DEVELOPMENT	EU Development Directorate General
	Civil	MAE	Italian Ministry for External affairs
	Military	MoD	Ministry of Defence
	Military	BKA	German Federal Criminal Police Office
	Civil	THW	German Civil Protection
	Military	Ministere de la Fedense	French Ministry of Defense
	Military	DRM SAG	French Military Intelligence
	Civil	Spanish Foreign Affair Ministry	
	Military	MoD	Spanish Ministry of Defense
	Military	Centro Nacional de Inteligencia	French Military Intelligence
	Civil	Agua de Portugal	
	Civil	Ministry of Foreign Affairs	
	Civil	Global Witness	English NGO
International	VV	IAEA, UNODC, UNEP-PCDMB, UN-LB	International Atomic Energy Agency; UN Office for Drugs and Crime; UN Environmental Program - Post Conflict and Disaster Management Branch; UN Logistic Base

Thank you for your attention

Contact details

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