

# CASTRA's Experience with EU Funded Innovation Projects Implementation

Vesselin Vassilev, PhD  
CEO

14 July 2016 , Sofia



[www.castra.org](http://www.castra.org)

[info@castra.org](mailto:info@castra.org)

- **Who we are, what we do**
- **CASTRA's EU-funded project experience case 1**
- **CASTRA's EU-funded project experience case 2**
- **Concussions**

## Companies

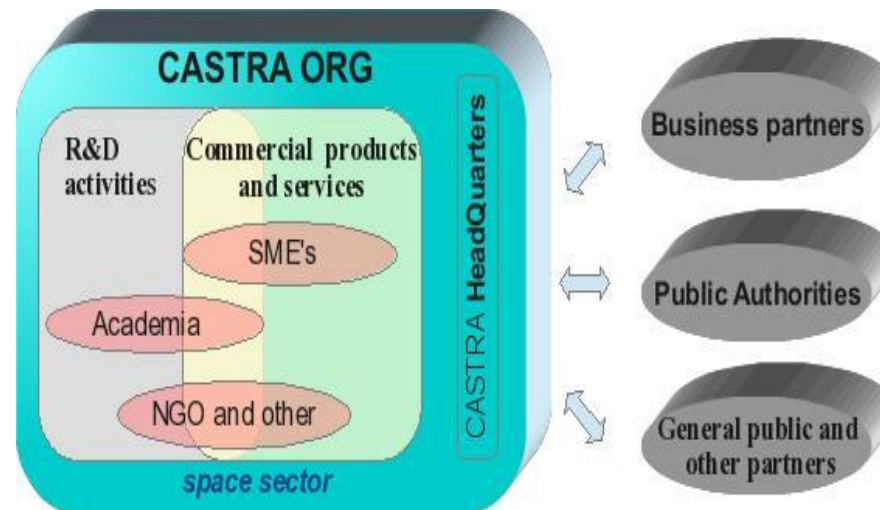
- Aegis Ltd.
- Telesys Ltd.
- Novorell Ltd.
- Lumycomp Design Ltd.
- SimSoft Ltd.
- BMG Bulgaria JSC
- PointL-Bulgaria Ltd.
- MicroPlus Apostolov Ltd.
- ElectronInvest Group Ltd.
- KONTRAX JSC
- O &K SD
- Mozaika Co
- Green Embedded Systems
- Surrey Satellite Technologies

14

## Academic organizations

- Sofia University with its 'Space Research and Technologies Centre'
- Institute of Cryobiology and Food Technology
- Technical University of Sofia - Department of Aeronautics
- Institute for Mathematics and Informatics, Bulgarian Academy of Sciences

4



## NGO's

- Remote Sensing Application Center-ReSAC
- Bulgarian Modeling and Simulation Association "BULSIM"

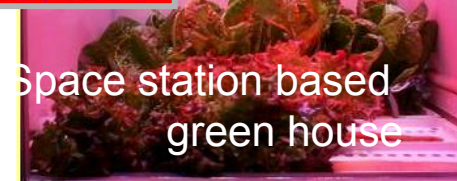
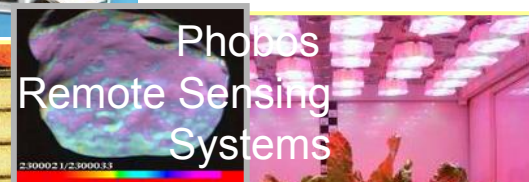
2

## PARTNERS

- Aerospace Engineering and Communications (ASE&C) M.Sc. Program at Sofia University
- Bulgarian Institute of Metrology
- OPTIX JSC, Bulgaria
- Micro-satellite and Space Microsystems Lab, University of Bologna, Italy
- Cluster of Serbian Aeronautical Industry – UVIS

## TWO Bulgarian cosmonaut space flight programs were implemented – 1979, 1988

Developed unique experience and infrastructure in program management, development of various spaceborn and ground instrumentation, R&D in fundamental sciences and other related areas

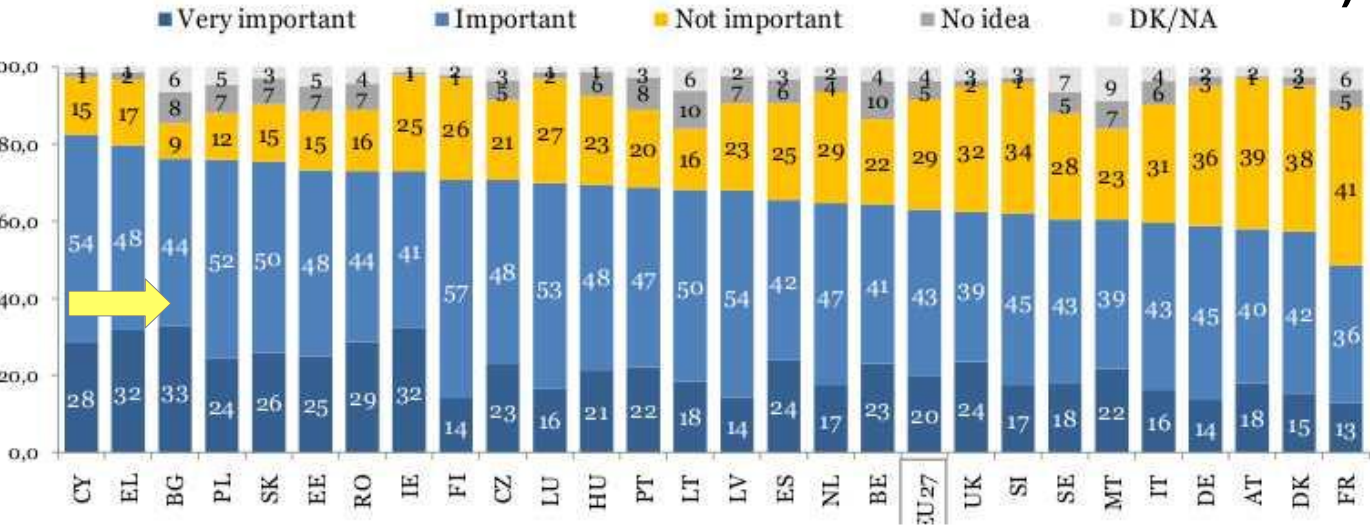


## NEW high-tech SME potential

Electronics, IC design, automation, robotics, UAV systems, high-speed satellite communications, ICT software and embedded systems and other.

**Importance of space activities for the future international position of the EU**

A)

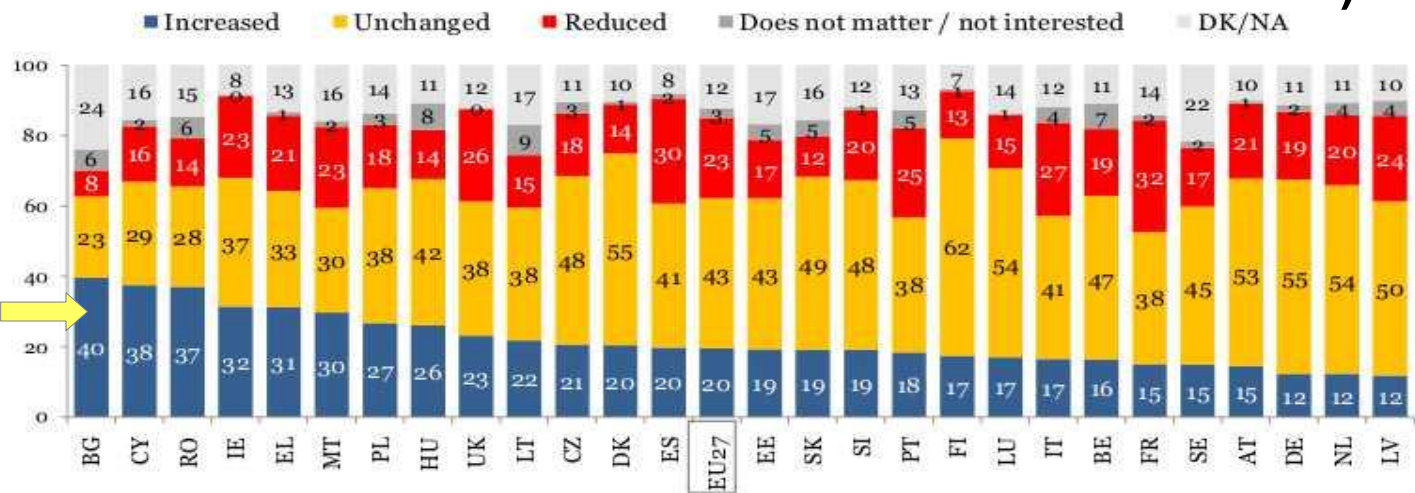


The public opinion in the East European countries is strongly biased towards supporting the importance of space programs for the EU future (see chart A).

## Bulgarians Public Support for Space

**The share of the European budget to cover all space activities including space exploration should be...**

B)



The public opinion in Bulgaria supports the most the increase of the EU budget for space programs (see chart B)

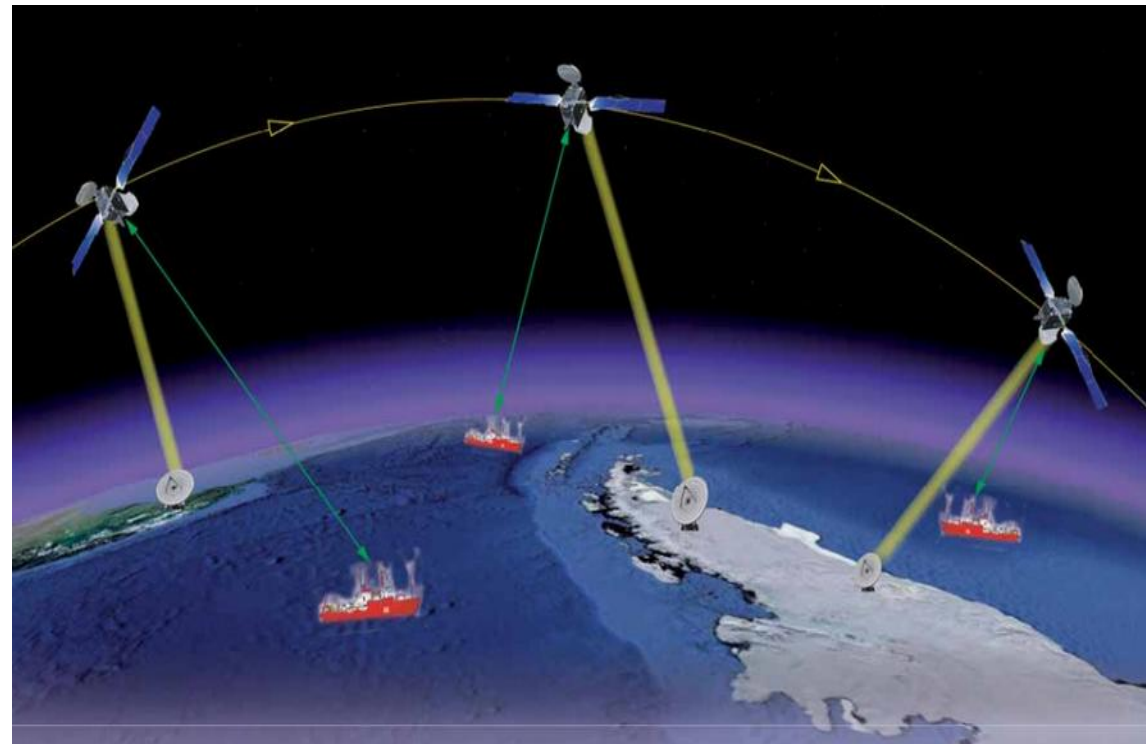
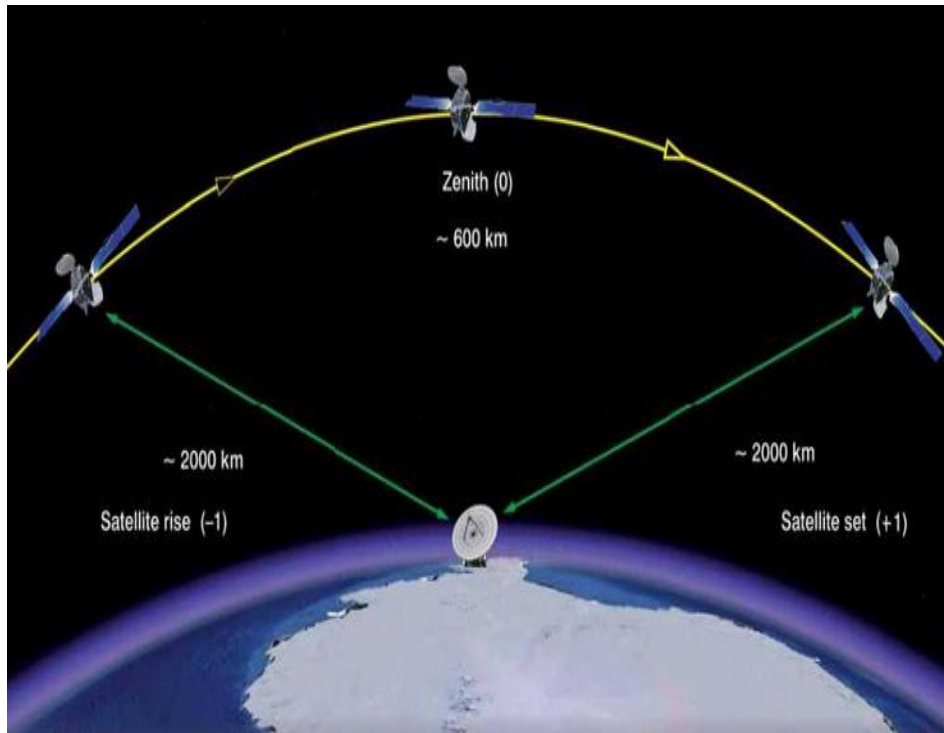
EU survey analyses ('Eurobarometer', 2012)

Q7. There are various budget priorities for the European Union. According to you, the share of the European budget to cover all space activities including space exploration should be:  
Base: all respondents, % by country

# **CASTRA's PROJECT CASE 1:**

## **Single national ESIF OP funded project**

High volume data transfer between a small satellite and Earth sensor **networks** , data **users** (e.g. in the **polar regions of Earth**) ...Land and Sea tracking of vehicles, humans, cargo, and other objects for the purpose of security, logistics, research etc ..



## Government (partial) funding contract



ОПЕРАТИВНА ПРОГРАМА  
„РАЗВИТИЕ НА КОНКУРЕНТОСПОСОБНОСТТА НА  
БЪЛГАРСКАТА ИКОНОМИКА” 2007-2013  
[www.opcsmnetitviness.bg](http://www.opcsmnetitviness.bg)

МИНИСТЕРСТВО НА ИКОНОМИКАТА И ЕНЕРГЕТИКАТА

ОПЕРАТИВНА ПРОГРАМА  
„РАЗВИТИЕ НА КОНКУРЕНТОСПОСОБНОСТТА НА  
БЪЛГАРСКАТА ИКОНОМИКА” 2007-2013 г.

ЕВРОПЕЙСКИ ФОНД ЗА РЕГИОНАЛНО РАЗВИТИЕ

ДОГОВОР ЗА БЕЗВЪЗМЕЗДНА ФИНАНСОВА ПОМОЩ

Приоритетна ос 2:	Повишаване ефективността на предприятията и развитие на благоприятна бизнес среда
Област на въздействие 2.4:	Насърчаване на бизнес кооперирането и кълъстерите
Операция 2.4.1:	Насърчаване на бизнес кооперирането и кълъстерите

ОТКРИТА ПРОЦЕДУРА ЗА ПОДБОР НА ПРОЕКТИ, ПОКРИВАЩИ  
ОПРЕДЕЛЕНИ ИЗИСКВАНИЯ ЗА КАЧЕСТВО С ОПРЕДЕЛЕН СРОК ЗА  
КАНДИДАТСТВАНЕ: BG161PO003-2.4.02 „ПОДКРЕПА ЗА РАЗВИТИЕТО  
НА КЪЛЪСТЕРИТЕ В БЪЛГАРИЯ”

Идентификационен номер на договора:	BG161PO003-2.4.02-0135-C0001
Регистрационен номер на проектното предложение:	BG161PO003-2.4.02-0135
Наименование на проекта:	"Развитие на високотехнологичен кълъстер в областта на космическите технологии и приложения"
Максимална обща сума на проекта:	3 683 981,40 лв.
Продължителност на проекта:	18 месеца
Брой страници	109 стр.

Approved project budget ~ 1.9M Euro;

- Only 50% will be reimbursed as grant by Bulgaria Government,

- 50% - CASTRA's own expenses → Investor needed;

- 100% of the budget needed to be available upfront for project execution



- **Lack of good synergy between the ESIF/OP MA and the mid-long term national industry/SME/Cluster development policies.**  
**(ESIF OP MA's tend to only act as project execution control authorities rather than being the RIS3 implementation 'enablers'.**

- **Contradictory & inconsistent administrative regulations:**

**Example: the members of the cluster organization are NOT ALLOWED to participate in the ESIF projects executed by the cluster itself!?!...other ...**

- **Inefficient effort/support/competence from ME experts to enable most RIS3 efficient ESIF project execution :**

**Example: Bulgaria/CATSRA lost 1M Euro direct foreign investment (project beneficiary's co-funding) due to not being allowed a project execution formal deadline extension in 2014, etc.**

# **CASTRA's PROJECT CASE 2:**

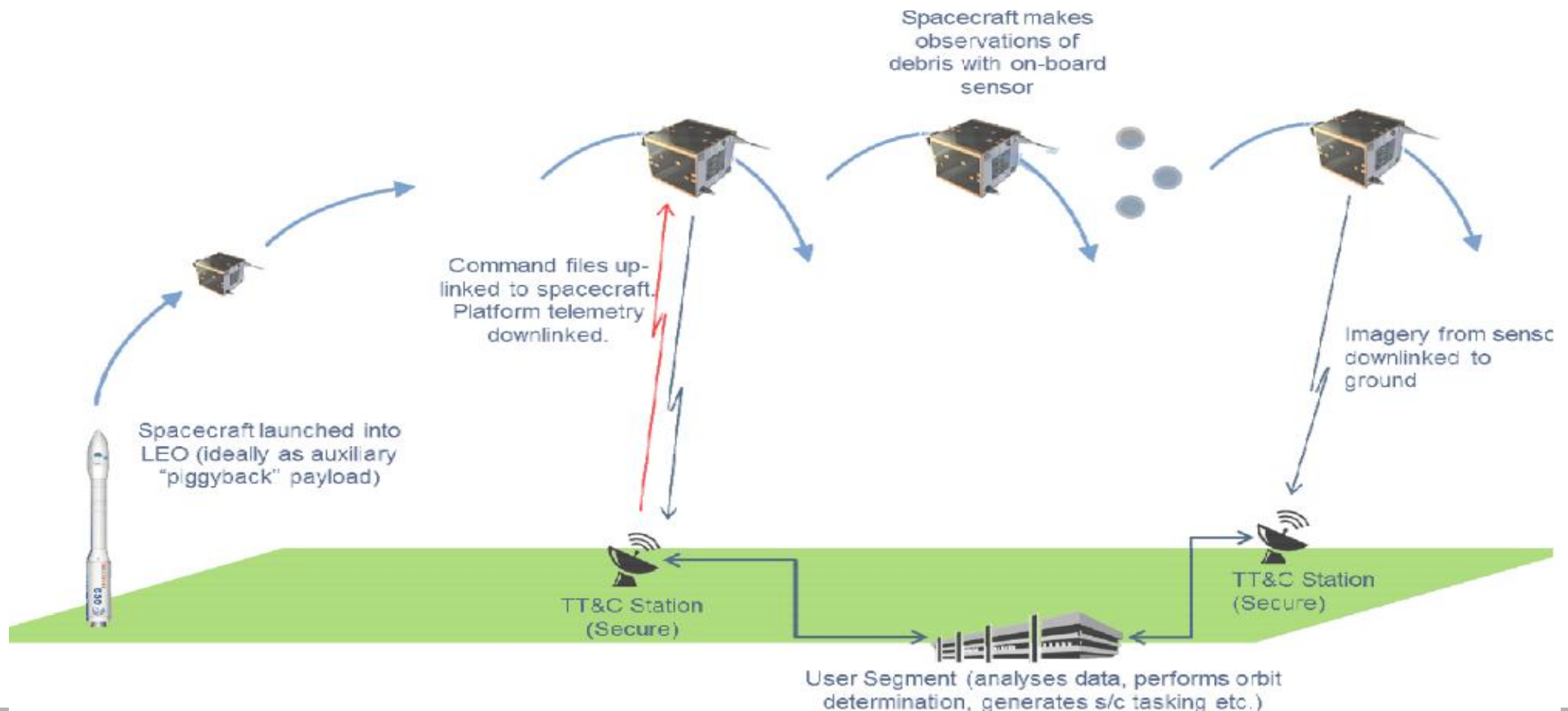
## **Cross-OP, Cross-funding authorities project**

## Bulgarian EU-wide innovation project initiative

### "Satellite Based Space Surveillance and Tracking System and Center of Competence for the benefit of Europe"

#### Project Figures:

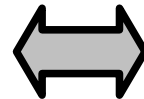
- **Budget: 40 M Euro**
- **Timeline: 4 years**
- **Funding source: NA (/ESIF/EFSI/Private/TBD)**



## CASTRA's Approach for Funding Allocation

### Project Ownership

- Private (as of today)
- Government / EU project initiative
- Public Private Partnership (PPP)
- Special Purpose vehicle (SPV)



### Funding Source

- ✓ Own/Private investment
- ✓ Bulgarian government
- ✓ ESIF/Ops in Bulgaria
- ✓ EU budget/Grant (E.g.H2020)
- ✓ Investment finance (EFSI/other)
  - European public
  - Worldwide private

- **Lack of good synergy at EU level between the EC /EU bodies on a consistent mechanism for funding of RIS3 projects of interest of BOTH the local governments and to the EU as a whole.  
Example : EDA is to drive implementation of dual use EU innovation projects WITHOUT any budget for their implementation (!?!?) but only relying on the 'good will' of the national OP MA**
- **Lack of good regulations /guidelines across EU member states (and their OP MA's) on cross - border definition & funding of ESIF innovation projects.  
Example: No clear mechanism/experience exists to program an ESIF Innovation projects jointly in e.g. EU member state A, B, C..**
- **Lack of good/efficient synergy between the national RIS3 and the EU-wide H2020 project calls priorities**
- **Lack of unified regulations allowing for complimentary funding of project through the different existing EU and national sources**

- There exist many good, high added value project ideas in the EU, of interest and benefit to BOTH the EU regions/members and to the EU as a whole;
- There exist numerous funding mechanisms in the EU - BOTH at the EU members and at the EU horizontal levels;
- There is a lack of good and /or efficient synergy between the ESIF funding sources both at national level (OP to OP) and at EU level (OP's to e.g. H2020, LIFE and other EU horizontal programs, including private investments)
- There is a lack of common/unified across EU member states administrative, legal and financing rules and conditions for ESIF project definition and execution  
(Each national/EU OP MA has today its own rules, which prevent cross OP project definition and execution at national and EU (cross member-states) levels;