# Evaluation of the results of the **Flamin** project

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### Performance Indicators (as specified in DoW in 2011)-1

#### Research productivity

number and quality of scientific publications increase by 10%

#### Relevance by socio-economic needs

 number of contracts with industrial governmental and NGO users will increase by 15%

#### Human resources:

- the number of recruited foreign incoming researchers will be increased by 4
- the number of repatriated Bulgarian researchers by 3
- The number of new project-based staff attracted in projects initiated as a consequence of the **AComIn** activities will be increased by at least 20 researchers
- number of defended PhD theses will be increased by at least 20%
- Participation in scientific events abroad will be increased by 15%
- Visits of foreign researchers will be increased by 20%

## Performance Indicators (as specified in DoW in 2011)-2

#### Innovation impact:

- The number of patent applications, submitted within AComIn, will be at least 4.
- The software licenses will be at least 3.
- several awards for IICT

#### Social impact:

- hundreds of visitors at the Doors Open Days and attendees at the Information Days and Stakeholders meetings.
- There will be dozens of media reactions to the AComIn dissemination efforts



## AComIn Evaluation February – March 2016

**Evaluation Criteria as by Deliverable D 6.1** 

- Human Resources
- Equipment
- Scientific results

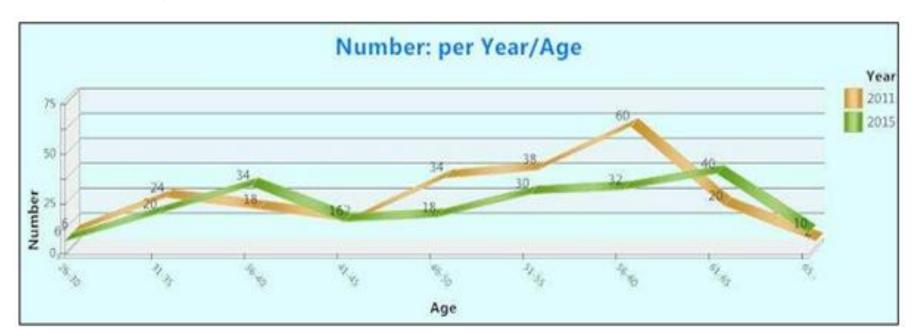
Materials provided by the grant holder institution

Results of on-site visit (presentations, interviews, Q&A sessions, discussions)

- Connectivity of the organization
- Project execution and organization
- Sustainability
- Review of AComIn DoW SWOT Analysis
- Strategic recommendations and action plan for further research
- Conclusions

### Personnel evolution over time

- IICT maintained almost the same number of researchers over 5 years
- Increase of the number of young researchers
  - Healthier age structure
  - Long-term potential for overcoming the "reversed pyramid" effect (prevalent across CEE countries)



#### **Gender View on Human resources**

- Total number of female researchers remained almost constant during the 5 years of the project, but
- there is a significant increase of the number of degrees they obtained



## Strengthening of human potential

#### AComIn effect:

- "Standard" benefits
- Absorption of all benefits resulting from the AComIn project
- New research directions

#### Remark

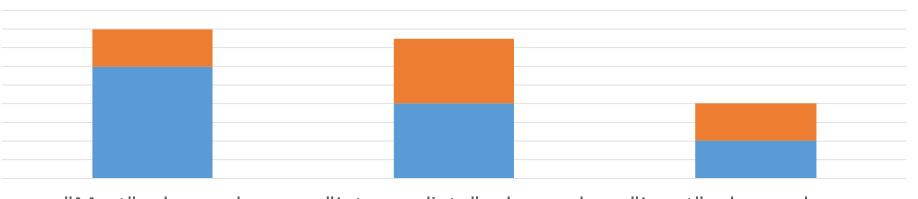
- Acting as "best practice" examples for the others

#### AComIn effect:

- Ready to make the next step
- Project facilitated rapid transition
- Impact of HW, SW and incoming personnel allowed for big step during the project

#### AComIn effect:

- Absorb a reasonable amount of new expertise
- Will require further strengthening



"Most" advanced

"Intermediate" advanced

"Least" advanced groups

Status 2011

Acomin influence

## **Smart Lab Equipment**

- Testing
  Simulation
  Acoustic
  Holography

  Data
  aggregation
  Images

  Data
  integration
  Images

  Data
  Access to Blue Gene/P
  integration
  Images

  Data
  integration
  Images

  Data
  integration
  Images

  Data
  software

  Analysette 22
  NanoTech+

  Smart Lab
- Acquired entirely during AComIn
- Attracts international interest
- The most visible and "popular" asset of the group
- Completed (practical) applications can be understood by nonspecialists
- Generates industrial projects and collaborations
- Reinforces existing research with complementary activities
- Results in creation of new research directions

## **Other related Equipment**

- High performance computing equipment, available through the new supercomputer of the Bulgarian HPC infrastructure
- This infrastructure is planned to be "aligned to the plans of the European Technology Platform for High Performance Computing" (ETP4HPC).
- Very-well utilized by IICT, even compared with well-known companies overseas.

#### Human Resources Equipme

### **Short Overview of Scientific Results-1**

A Academic only

Industry
Public sector

#### Materials & Testing

- Neuro-fuzzy approach for visualisation of 3D acoustic waves propagation
- Enhancement of acoustic noise source localization and identification;
- A Target detection and parameter estimation;
- Development of a new type of chemical nickel coatings including nano elements;
- Intelligent methods for technical diagnostics
- Tribology

## High-performance computing

- Wigner Monte Carlo algorithms for quantum transport in nano-electronics;
- A Robust finite element methods and algorithms for advanced computer simulations;
- Advanced computing in dynamical analysis of elastic structures;

Transport

- Traffic optimization in communication networks;
- P Intelligent Transportation Systems;
- Numerically Effective Kalman
- Estimator Algorithm for Urban Transportation Network

#### Equipmer

### Short Overview of Scientific Results-2 A Academic

A Academic only

Industry

P Public sector

## Semantics, Language & Speech processing

- Automatic processing of image annotations in large-scale image databases;
- Application of Educational Data Mining for Analysis of the eLearning portal UCHA.SE;
- News Media Analysis and Creation of Language Resources;
- Language Technologies Applied for Generation of a Diabetes Register;
- Speech processing with focus on Bulgarian speech.

#### 3D & Video processing

- Digital Watermarking service to provide a mechanism to secure and protect the published multimedia
- 3D CT improvements by the optimization of the denoising process of the original degraded image
- Biometric Authentication based on ear biometry
- A Video Stabilisation
- Development of a graphical Braille screen that allows the lecture of the graphical web content in tactile way
  - 3D reconstruction of cultural heritage



- 3D modeling, rendering and printing has been profitably exploited in cultural heritage with different targets: to reconstruct from 2D pictures; to interpret for understanding; to compares artworks from different sources; to share 3D resources.
- The Smartlab is one of the institutions that has more experience in this field having applied it in at least two important contexts:
  - for the production of well-known artifacts of the Thracian treasure (431-424 BC).
  - in the Pavia exhibition producing characters, scenes and architecture of the tapestry (1528-32 AC).



#### Publications bibliometric statistics -1

- Two periods compared: 1-18 months vs. 19-36 (+extension 4 months)
  - Additional publications are still in the pipeline
- Two classification schemes
  - highest average quotation journals
  - journals importance on specific subjects

Publications		AComin 1-18				AComin 19-40			
		N	Total ∑	Average	Range	N	Total ∑	Average	Range
IF-SJR-DOI	IF	20	23,64	1.18	0.31- 3.82	26	65.21	2.50	0.28- 24.57
	SJR	20	13.36	0.68	0.17- 2.18	26	35.98	1.38	0.21-9.73
SJR-DOI	SJR	26	8,632	0.332	0,332	43	11.96	0.278	0.15-0.34
Other Pubs		54				91			
Patents						4(+4)			

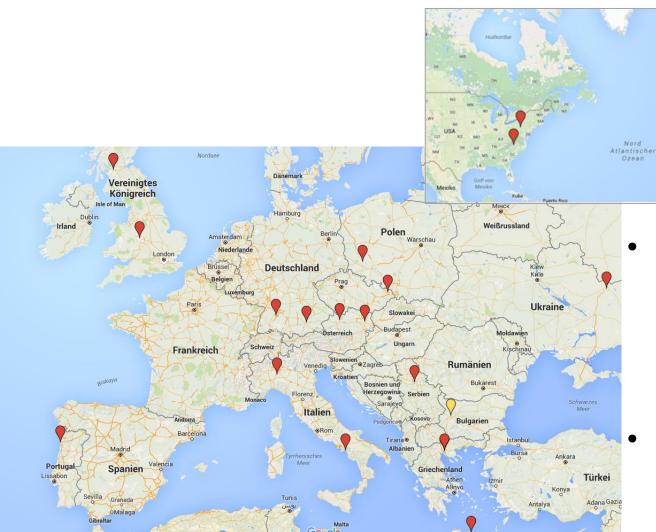
## **Publications bibliometric statistics -2**

Publications		AComin 1-18				AComin 19-40			
		N	Total ∑	Average	Range	N	Total ∑	Average	Range
	IF	20	23,64	1.18	0.31-3.82	26	65.21	2.50	0.28 24.57
IF-SJR-DOI	SJR	20	13.36	0.68	0.17-2.18	26	35.98	1.38	0.21-9.73
SJR-DOI	SJR	26	8,632	0.332	0,332	43	11.96	0.278	0.15-0.34
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- Comparison between first and second phase shows that following factors more than doubled
  - the extensive value (Total  $\sum$  IF)
  - the quality (Average IF)
  - the feature related to the scientific domains (SJR SCImago Journal & Country Rank)
- In particular, it is worth to remark
  - activity in quantum mechanics (IF 24.57 and SJR 9.73)
  - Increased number of publications in high quality international journals
  - strong reduction of the number of publications in "local" journals
- Remarkable is also the number of patents, two also extended to WIPO
- Additionally 4 books
- Strong positive effect of the AComIn project can be observed

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## **International exchanges**



- Direct institutional international links to 15 institutions around Europe and 2 in the US
  - Additional collaborations involve individual researchers

## **National & Regional level**

- Strong national presence
  - Research and education
  - Collaboration with companies (including SMEs)
  - Local specialists and Bulgarians who came home from abroad
  - > BAS IICT is a national centre of excellence
- Attracting best people from neighbouring countries (outside of EU)
  - Serbia, Macedonia, Ukraine
  - Building bridges across EU borders
  - Potential to attract people also from Hungary, Romania and Greece
- BAS IICT is a strong regional hub

- Links with other EU countries could be developed further
  - Connections to Northern & Western Europe quite limited
    - Exchange of individual researchers (R2R)
    - Close collaboration between universities & research centers
    - EU projects
  - Potential to become a "gateway" to the Balkans
    - Should act quickly (Croatia is strong competitor)
- Despite excellent research IICT could still increase visibility abroad
- Acomin project allowed IICT to strengthen its position and became strong regional hub
- Strong potential to grow internationally needs to be recognized by the national authorities and acted upon

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## **International exchanges**

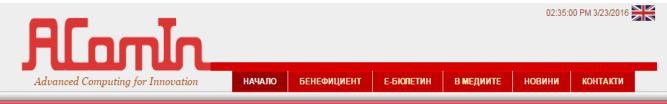


AComIn project provides an opportunity to increase this number considerably

#### **Communication and connectivity**

- Standard means of communication used by the IICT (and the BAS) and their personnel
  - Websites (institutional and individual) in English and Bulgarian
  - Publications (books, journals, conference proceedings)
  - Seminars (scientific and to the general public inclusing industry)
  - Conference presentations / organization
  - Newsletter in English and Bulgarian
  - TV based
- Lack of use of social media reduces reach of dissemination and overall impact
- The following social media should be considered by the institution and individual researchers
  - LinkedIn, Facebook, Google+
  - Google Scholar, ResearchGate, Academia

#### Website



Цели и работни пакети Научна тематика Индикатори за изпълнение Заети позиции postdocs SmartLab периферия Потребителски групи Публикациии Монографии Събития Резултати Отворени позции причини • Изброените области са

фундаментални в ИКТ, в тях се очаква

#### AComin: Съвременните пресмятания в полза на иновацията

<u>Финансиране:</u> "Капацитети" в 7-ма Рамкова програма на Европейската комисия (ЕК), "Научноизследователски потенциал в конвергентните райони"

Конкурс, договор: FP7-REGPOT-2012-2013-1, договор 316087

Тип на проекта: Поддържаща дейност (Support Action)

<u>Продължителност:</u> 42 месеца <u>Дата на стартиране:</u> 1 октомври 2012

Страница в Интернет: <a href="http://iict.bas.bg/acomin">http://iict.bas.bg/acomin</a>

<u>Бенефициент:</u> Институт по информационни и комуникационни технологии на Българската

Академия на науките (ИИКТ-БАН), <a href="http://iict.bas.bg">http://iict.bas.bg</a>

Координатор: проф. дмн Галя Ангелова (http://www.lml.bas.bg/~galia)

<u>Партньори</u> (без директно финансиране от ЕК):

- проф. Асен Асенов фирма Gold Standard Simulations Ltd.
   (http://www.goldstandardsimulations.com/) и Група по моделиране на устройства, Университет на Глазгоу (http://www.elec.gla.ac.uk/groups/dev\_mod/)
- проф. Олег Илиев Катедра по симулиране на течения и материали, Фраунхоферов институт по индустриална математика в Кайзерслаутерн (<a href="http://www.itwm.fraunhofer.de/">http://www.itwm.fraunhofer.de/</a>)
- Prof. Johannes Kraus <u>Department of Mathematics, University of Duisburg-Essen</u>
- проф. Джон Доминг Международен институт по семантични технологии (http://www.sti2.org)
- **проф. Вирджинио Кантони** Лаборатория по компютърно зрение и мултимедия, Университет на Павия (<u>http://vision.unipv.it</u>)

## Management structure

- The management structure for BAS IICT in general and for the AComin project in particular, is classic, very robust and lean.
- The Scientific Council of BAS IICT restructuring the original scientific units has established at the last year of the AcomIn project, thirteen departments that functionally cover all the research lines.
- This IICT organisation in addition to scientific research and financial management issues is appropriate to deal with the human resources, with publishing, to take care of the institute buildings, of the equipments, and in general to the ordinary services of an international institute of excellence.



HOME

**ABOUT THE HOST** 

E-NEWSLETTERS

**APPRECIATION** 

NEWS

CONTACT

Objectives & Work Packages

Topics in ICT

Progress beyond the State of the Art

**Employed Incoming Postdocs** 

SmartLab Equipment

**User Communities** 

**Publications and Talks** 

Monographs

Events

Deliverables

Opened Positions

Team Area

DELIVERABLES DOCUMENTS REPORTS MILESTONES & APPS
REVIEW-WP6

#### WP7: Public Procurement Procedures

Procedure for airline tickets

- notice
- decision

Procedure for equipment (1)

documentation

Procedure for equipment (2)

documentation

Procedure for creation of series of three movies to present the project AComIn

- public invitation
- technical reference
- documentation

- All main units involved in the AComIn project will continue working after the end of the project
  - Participation in EU COST networks, Bulgarian Science Fund, etc.
  - IICT will organize second series of international conferences
    - Biannual effort to rotate with the LSSC conference series (aka. the Sozopol Conferences)
    - Recent Advances in Natural Language Processing (RANLP)
    - Potential for new partnerships and fundraising → directly related to human resources
- Very strong groups in Advanced Computing, Language and Semantic Modelling and Image and Signal processing have a potential to attract young researchers
  - Realization of this potential strongly depends on availability of softmoney-funding

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- 1. Equipment operators should remain employed past the project end
  - Practical knowledge, built up during the AComIn, is in minds of the researchers
  - Serious risk of knowledge drain if researchers would leave
  - Each apparatus can be operated by several people
  - A dedicated technician could be hired if more routine work shows up:
    - Support research
    - Perform measurements / experiments / tests for third parties
- 2. Maintenance of equipment
  - Currently no dedicated budget available
- 3. Revenues from more "commercial" activities
  - Should be re-invested in equipment and maintenance
- 4. Exploit infrastructure when not used for research

- Equipment of the type that was purchased for the SmartLab becomes obsolete very fast
  - After 2-3 years research involving this equipment will no longer be competitive
- IICT is aware of this problem and plans to use Bulgarian mechanisms to fund purchase of additional / replacement equipment
- It is advised that communication to prioritize the needs will be started as soon as possible
  - Complex issues due to competitive interests of stakeholders
  - Systemic solution as close to consensus as possible should be sought

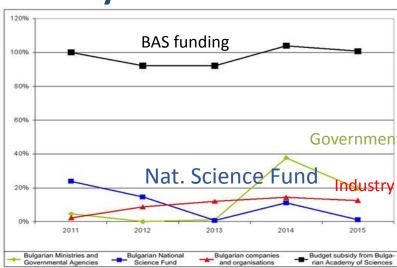
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## Sustainability – collaboration with academic partners

- AComIn has lead to establishing collaborative links with academic institutions
  - Primarily on the regional level
- AComIn should be the starting point for concentrated efforts focused on internationalization / globalization
  - Bilateral agreements (through Acadmy of Science mechanisms)
  - Bilateral collaborations R2R
  - COST actions
  - Funding through all EU mechnisms (they always involve collaboration)

## Sustainability – funding stability and collaboration with industry

- Work for Bulgarian companies and organizations is about 10% ——
- More or less stable over time
- Open issue IPR management
- Opportunities:
  - ➤ Should be possible to climb to 20-25%
    - Probably some equipment not used all the time
  - Foreign companies could be approached
    - Regional
    - > Western Europe
  - ➤ Set up dedicated actions to approach them



1	Insufficient modern equipment in key fields like 3D microstructure
	input/output, sounds, speech, dynamics which makes IICT dependent
	on international partners' data.

SmartLab equipment has been a giant leap forward to diversify and reinforce the research activities and to attract new researchers.

(+) Path for future research, reinforces the existing infrastructure and creating a unique eco system for more diversified activities.

(+) Core computing infrastructure can be complemented by SmartLab verification measurements.

Cooperation with leading EU partners is certainly improved but could still be enlarged.
 IICT has skill and facilities to perform experiments on its own, or even conduct experiments that cannot be done in the partner laboratories.

Know how transfer to Bulgarian user communities and society successfully initiated.

- Creation of technology transfer office "Information and Communication Technologies for Energy Efficiency".
- Participation in network of innovation centers, technology transfer offices and innovative companies, entitled "Bulgarian Technology Transfer Network (BTTN)".
  - Development of training programs for PhD students in Acomin.
  - No structured training within IICT and could be expanded to industry.

2	Weaker international orientation in some areas of the IICT research.  Focus on locally important topics in papers published in local journals and proceedings.		
Current status:			
(+)	BAS IICT has been very successful to attract the best people from the region (Bulgaria and neighboring countries) and has become a strong regional hub.		
(+)	<ul> <li>The number of significant publications increased in all research fields of the AComIn</li> <li>Topics and quality at same level as foreign peers.</li> </ul>		
(-) (+)	<ul> <li>For some of the new emerged research directions, however, it was difficult, in a relatively short time, to manage crossing the barrier to the Western European countries.</li> <li>One good example of break-through research, which was internationally acknowledged, is in the field of 3D-Reconstruction of cultural heritage.</li> </ul>		

3	Relatively low-flow of incoming researchers from EU and third countries.
Current status:	
(+)	<ul> <li>The acquisition of Smartlab and the advertising of the new research facilities and knowledge will make definitely the institute more attractive.</li> <li>BAS IICT was successful to attract many post-docs from neighboring countries.</li> </ul>
(-) (+)	<ul> <li>Given the level of development in some of the research unit before the start of the AComIn project, it was practically impossible to attract Western European researchers, which would perform long time research at the IICT.</li> <li>The acquisition of the Smartlab and the advertising of the new research facilities and knowledge make definitely the IICT more attractive.</li> </ul>

4	Insufficient dissemination activity for promoting IICT as a key actor in the 2020-agenda.
Current status:	
(+)	Scientific output is at a high and qualitative level.
(+)	<ul> <li>Very intensive dissemination through traditional academic channels         (publications, participation to international conferences).</li> <li>The IICT organized four international renewed conferences, one Information         Day and one Open Door day.</li> </ul>
(+)	BAS IICT was present in <b>2 TV programmes</b> .
(+)	Newsletters are published in Bulgarian and English.
(-)	<ul> <li>The institute should promote itself also in alternative ways via social media. Now it mainly uses the classical approach.</li> <li>Social media are great to reach an international and diverse audience.</li> </ul>

5	Insufficient IICT visibility as innovation driver.
Current status:	
(+)	Since last SWOT analysis the <b>visibility increased significantly</b> . Several technology transfer seminars have been organized reaching <b>more than 430 participants</b> .
(+)	Impressive participation of AComIn in an event with wide social impact in the Exhibition "The Battle of Pavia" (Visconti Castle in Pavia, Italy, in June-November 2015 in association with EXPO-2015 in Milan).
(-)	The institute should <b>promote itself also in alternative ways via social media</b> .

6	Lack of expertise how to approach the technology transfer and IPR issues. Only first steps towards development of an IPR protection strategy for the institute are made. No applications for patents to the European Patent Office.
Current status:	
(+)	Some progress has been made on IPR matters and strategies.
(+)	Several participations in international training events dedicated to Innovation Policy and IPR Issues.
(+)	<ul> <li>Four patent applications were submitted after project month 19 (two to WIPO and two to the Bulgarian patent office BPO).</li> <li>Four other applications are in preparation including one for WIPO.</li> </ul>

Companison with Swor analysis -7				
7	Lack of strategy for building industrial User Communities and attracting PhD students from innovation-absorbing companies.			
Current status:				
(+)	<ul> <li>BAS-IICT plays a vital role in offering continued education to obtain a PhD via "correspondence" or "with independent preparation and paid PhD study".</li> <li>These PhD students often come from industry and should be seen as a "bridge" between academia and the outside world.</li> </ul>			
(+)	<b>Four contacts were established with Business Representatives.</b> Two of them subsidiaries of large international industry, who are potential collaborators in future joint activities.			
(+)	<b>Fourteen projects for joint developments</b> were started with the AComIn team contributing pilot studies and/or prototypes. Three of them with companies.			
(+)	Six projects were completed in the Competitiveness Operational Programme, coordinated by Bulgarian SMEs in collaboration of IICT as a research partner providing innovation			
/ \	The institute should promote itself more via social media and researchers should be			

encourage to network with foreign groups.

#### **Publications**

#### **Current dissimination is very classical:**

- Many excellent papers, presentations, chapters in books, etc.
- Intellectual property, Patents
- Conferences
- BAS, IICT and Acomin websites
  - Very clear websites
  - All information is there and presented in a very lean way
  - But people have to do the effort to look for this information

#### **Recommendations:**

- > Think out-of-the-box to reach a wider and international audience
  - Surprise people
  - Improve visibility and interaction
- Make yourself, your research and institutes easy to find
  - Push information to interested people
  - Do not expect them to look for it
- Little work needed to republish existing data

## **Networking**

#### Other institutes and researchers

 Often via personal contacts. How are contacts kept alive/traceable when people leave?

#### Exposure to the outside

• Some researchers are well accustomed to outside influence. Younger people need the possibility to get exposed more

#### From academia to industry

Two different worlds that do not know each other and speak a different language

#### Opportunities

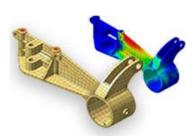
- > Everyone should actively look to expand network and look for opportunities.
  - Academic vs application level
  - Local vs international orientation
  - Get inspiration from others
- > Share information
  - Within group once a month dedicate a short coffee break to this
  - Informal meetings such as SAMPE Europe

### Market Trend1: Integration and digitisation



#### Because of 3D revolution

- The way components are designed will change completely
- Tendency to fully integrated design-production-testing modeling
- Theoretical simulation can be combined with more focused physical testing with SmartLab equipment.
- New opportunities for BAS IICT
  - Computing & Simulation
  - > Combined testing with SmartLab equipment
  - More modelling expertise needed
  - Digital jobs can be carried out everywhere. Location less important.



tp://www.midasnfx.com/Experience/ScheduleDemo\_Read.asp?idx=472&pg=1

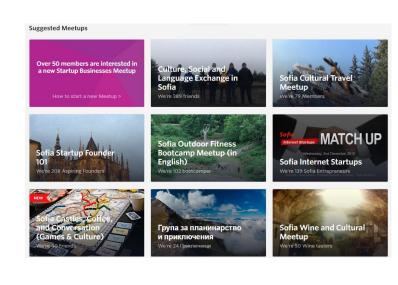
# Market Trend2: Social networks and non-conventional actors

- Social networks
  - To connect and keep informed about evolutions.
  - Have a feeling with trends and development.
  - But also to increase own visibility via "popular" news feeds.
  - Great source for new ideas.
- Examples
  - LinkedIn
  - Meet-up
    - P2P meetings, startups, etc.
    - Seem to be very active in Sofia.
    - They have alternative views and develop non-classical ideas
- Traditional approaches are not sufficient anymore!!

#### Innovation is also using available resources

- Sofia startup scene is very active
  - Does BAS IICT know them?
  - Startups are more commercial and marketing minded
  - Academia more research oriented
- Might be interested in
  - Smart Lab
  - Semantic language and image processing
  - Traffic control
  - ...





Sofia Open Data &

Linked Data Meetup

SOFIA StartupBlink Sofia

ProductTank Sofia

**BETAPITCH** 

Sofia Expat/Socializing

Food Startups Meetup

Sofia Outdoors Meetup

#### Market Trend3: Diversification of sources of income

- Classical academic
  - National science funding
  - Large EU projects
  - Large competition
  - Significant upfront effort to pass project proposals
- Alternative sources
  - Contract research with companies
  - Industrial networks and frameworks
  - Startups
  - Borders between academia and industry fading
  - Shorter time to ramp up

(Market) Trend 4 Digital Access and Preservation of cultural heritage

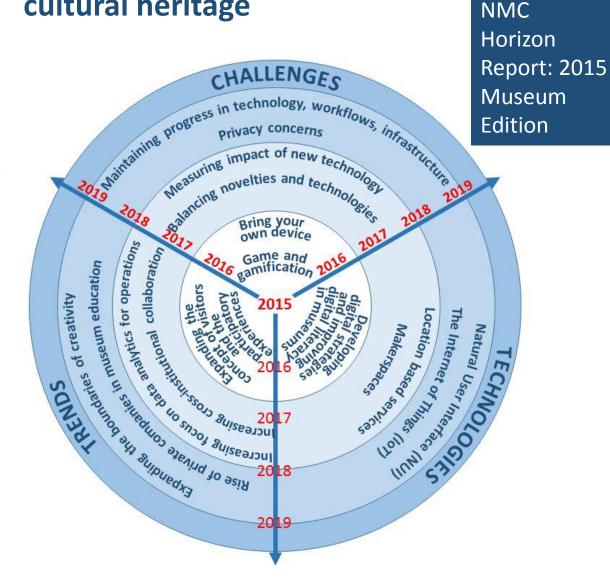
Interdisciplinary work between

- Natural Language
   Processing
- Semantic web (Internet of Things)
- Image processing and Computer Vision
- Visual Analytics

All relevant experience is within IICT BAS (acquired through AComIn).

Very good opportunity for interdisciplinary projects

- between teams and
- at regional level



# General conclusions

We acknowledge that the project was dully completed and fulfills all performance indicators expressed in the DoW, as follows

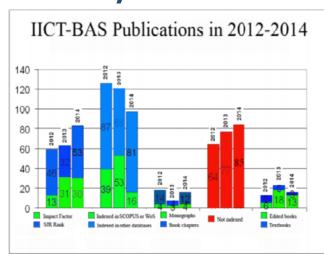
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# **Performance Indicators** (as specified in DoW in 2011)-2

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- number of defended PhD theses will be increased by at least 20%
- Participation in scientific events abroad will be increased by 15%
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Newly employed at 4 positions Ukraine(3), Russia(1), Greece(1), Serbia(1), Macedonia(1), Austria (1), Italy (1)







23 (Average per year 5,6) compared with 3 in 2011







## **Performance Indicators** (as specified in DoW in 2011)-3

#### **Innovation impact:**

- The number of patent applications, submitted within AComIn, will be at least 4.
- The software licenses will be at least 3.
- several awards for IICT

#### Social impact:

- hundreds of visitors at the Doors Open Days and attendees at the Information Days and Stakeholders meetings.
- There will be dozens of media reactions to the **AComIn** dissemination efforts

4 Patents + 4 in preparation



3 open source licences



Pitagor (Prof. Galia Angelova) for successful leadership of international projects several best-paper awards at various conferences



430 attendees at Information Days, 300+ at Doors Open Day











### Why should people come here?













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Rich culture

Sports

Good shopping

- Friendly Research Environment and team dynamics
- Equipment
- Different Experience from mainstream
- Very good theoretical background
- Other scientific insights

Language is not so difficult!

University – университет

yliopisto (Fin) –πανεπιστήμιο (Gr) -egyetemi (Hu)

We are happy to note the great progress that IICT BAS achieved through the project AKOMIN

Compared with neighboring countries here it is one of the best equipped centers throughout the region.

We hope sincerely that by built a huge network of partnerships during the project, and with the help of young scientists, who joined the team AKOMIN, the institute will consolidate and further increase its regional and international prestige in the future.

Щастливи сме да отбележим големия напредък, който ИИКТ-БАН постигна чрез проекта АКОМИН.

В сравнение със съседните държави тук се намира един от най-добре оборудваните центрове в целия регион.

Надяваме се искрено, че чрез изградената огромна мрежа от сътрудничества по време на проекта, както и с помощта на младите учени, които се присъединиха към екипа на АКОМИН, институтът ще консолидира и увеличи още повече своя регионален и международен престиж в бъдеще.

Detailed information will be publicly available in Deliverable 6.2, end ofMarch 2016, through the AComIn web page http://www.iict.bas.bg/acomin/index.html

# Благодаря ви за вниманието!

Thank you for your attention!

Grazie per l' attenzione ! cantoni@unipv.it

Dziękuję za uwagę paprzyck@ibspan.waw.pl

Dank u voor uw aandacht! dirk\_philips@yahoo.com

Vielen Dank für Ihre Aufmerksamkeit! Mulţumim pentru atenţie!

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