PARTNERSHIP FOR PROMOTING GREEN ENERGY IN THE RURAL AREA OF THE ROMANIAN-SERBIAN CROSS-BORDER REGION – GEROS

Goal of the project

- Increase the level of awareness and information regarding the use of green energy in rural areas by know-how transfer in the cross-border area
- Creation of a group of opinion leaders having know-how in the green energy domain
- Improvement of the infrastructure for insuring better cooperation and knowledge transfer regarding green energy in the cross-border area
- Supporting better preparation for people to develop new activities and to find new jobs in the green energy domain in the cross border-area
- Promoting the importance of using green energy sources for a sustainable development among the population in the cross-border area.

Short description of the project

Project supposed cooperation with Research Institute for Renewable Energies, for realize infrastructure connected and activities for training researches by cooperating with partners from Romania and abroad. The main base of the project consisted in use of experience and competence of Polytechnic University of Timisoara accumulated in the last forty years.

Acting according with the European and both Romanian and Serbian strategies for sustainable development, the project focused on transferring the knowledge and good practice from Romanian institutions that have expertise in the green energy field to the cross-border rural area.

The project addressed two key issues of rural development: the lack of information regarding the use or renewable energy and the high rate of unemployment.

More than that, the joint implementation and the large number of activities that were done in cooperation had a high impact on the connectedness, cultural and social aspects of the cross-border interactions.

Project implemented by

1. UNIVERSITATEA POLITEHNICA DIN TIMISOARA (UPT), Romania, Lead Partner
2. ZITISTE MUNICIPALITY, Republic of Serbia, Partner 1
3. FUNDATIA PENTRU CULTURA SI INVATAMANT "IOAN SLAVICI", Romania, Partner 2

Implementation period

06.10.2015 – 05.10.2016

Main activities

- Launching and Closing Seminar's in RO and RS, for clearly present the goal, objectives and the project expected results, for actors of the rural areas (local authorities, SME's, NGO's, community representatives);
- Creation of the virtual network, with three components that are consistent with three different purposes: the project website, the web platform, and the green energy portal;
- Creation of Green Energy Promotion and Counseling Center at Žitište Municipality, Srednje Banatski County, with a capacity of 30 people, equipped adequately to host different activities;
- Organizing of two trainings, in Žitište, Srednje Banatski County and Timișoara, for preparing Stakeholders in the frame of green energy;
- Organizing cross-border caravan, for 3 days, which followed the route Timisoara, Jimbolia, Kikinda, Zrenjanin, Vrsac and Resita;
- Organizing a School Project contest between schools from the rural areas from both countries in the frame of green energy;
- Publishing a detailed study on the potential sources of renewable energy in the Romanian and Serbian border region.

Results

- **44 stakeholder trained**, in green energy applications
- **287 pupils informed about green energy**, which was informed by the cross-border caravan, in Timisoara, Jimbolia, Kikinda, Zrenjanin, Vrsac and Resita
- **16 school projects about using of green energy,** presented in competition
- **1 green energy cross-border virtual network**
- **1 Green Energy Promotion and Counseling Center**
- **190 actors of the rural areas** (local authorities, SME's, NGO's, community representatives) informed about project.

Applicability and transferability of the results:

- Best practices created will be applied also to future generations;
- The studies and materials created for the project will be used and improved for future years;
- The structures created will contribute to the development of future projects.

Financed through/by

Romania - Republic of Serbia IPA Cross-border Cooperation Programme,
Project number: MIS ETC CODE: 1414

Research team

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Dinu GUBENCU
Nicolae LONTIS
Marinela BALUT
Gabriel MĂLAIMARE
Francisc POPESCU
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POLE OF COLLABORATION IN NEW FUNCTIONAL ALLOYS - POCAL

Goal of the project

To develop a cross-border network for R&D in New Functional Materials Engineering, adapted to the specific areas of interest (metallurgy) and novel developments (functional, multifunctional and intelligent materials as well as micro and nanoengineering) in the field
Via:

- transfer of knowledge for the beneficiaries looking for continuous education (from their existing aptitudes in metallurgy into novel materials fabrication),
- a base for research and training for students and researchers
- information and connections through collaboration, for beneficiaries looking to develop independent activities in the field of Advanced Materials and Micro/Nanoengineering.

Short description of the project

- Creation of POCAL Cross-Border Network
- Development of interconnected innovation clusters
- Joint research in Advanced Functional Materials
- Design of the transfer of knowledge mechanisms
- Promotion activities
- Development
- Preparation for self-support

Project implemented by

- Politehnica University Timisoara, Romania
- Minning and Metallurgy Institute Bor, Republic of Serbia

Implementation period

23.09.2016 -22.09.2017

Main activities

1. Design & implementation of POCAL mechanisms
2. Media campaign and POCAL web portal
3. Focusing meeting
4. Study of regional needs and opportunities
5. Updating the fabrication and functional exploration laboratory
6. Publication in special issue of Journal "Copper"
7. Equipment acquisition for microstructural investigations
8. Materials development and optimization
9. Materials characterization
10. Demonstrator
11. Common activities to publish scientific papers
12. Participation in scientific international events
13. POCAL ToK Center
14. Open day
15. Workshop
16. Joint applications
17. Preparation for self-support

Results

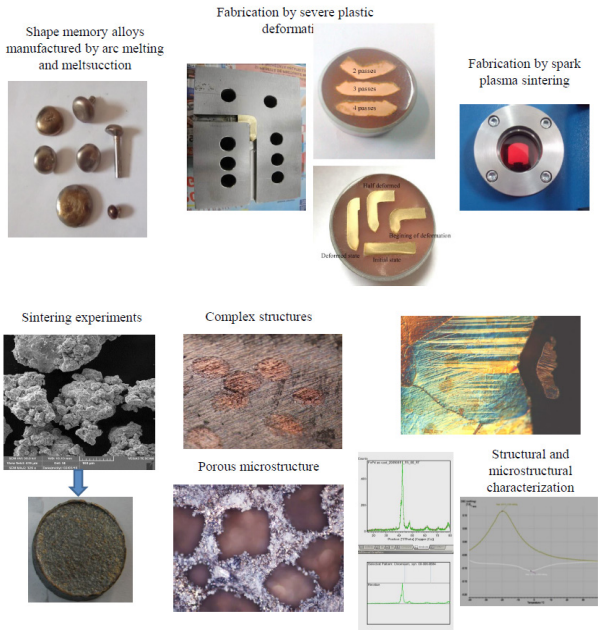
High vacuum microfabrication unit

Spark plasma sintering unit

X-ray diffraction unit

Acquisition of new equipment

Development of new materials and technologies



Patent application: Shape memory controlled diaphragm

Cross-border collaboration: workshop, open day

Applicability and transferability of the results:

Development of the capacity of the partners to develop coordinated research in the field of advanced materials micro and nanoengineering, including via collaboration with industrial partners.

Research Centre

POCAL Transfer of Knowledge Center

Financed through/by

Romania – Republic of Serbia IPA Cross-border Cooperation Programme.

Research team

UPT Team
Joint project manager: Prof. Corneliu M. Craciunescu
Joint financial manager: Ms. Adriana Szakallas/ Monica Bota
Joint marketing manager: Dr. Ing.Iosif Hulka
Researcher 1: Prof. Ion Mitelea
Researcher 2: Prof. Victor Budau
Researcher 3: Assoc. Prof. Dragos Utu
Researcher 4: MSc. Ing. Lazar Soveja

IRMB Team
Joint Scientific Advisor: Dr. Ana Kostov
Joint research coordinator: Dr. Aleksandra Milosavljevic
Researcher 1: Dr. Radisa Todorovici
Researcher 2: Dr. Zdenka Stanojevic Simsic
Researcher 3: Dr. Mile Bugarin
Researcher 4: Dr. Milenko Ljubojev
Researcher 5: Dr. Borivoje Stojadinovic
Researcher 6: Dr. Sladan Milenovic
Internal audit coordinator: Vesna Floric

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EUROPEAN PRE-QUALIFIED STEEL JOINTS (EQUALJOINTS)

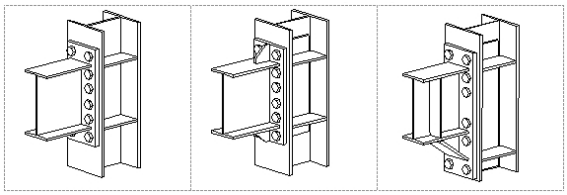
Goal of the project

The goal of the project is to introduce in the European practice a qualification procedure for the design of moment resisting connection in seismic resistant steel frames, in compliance with EC8 requirements.
Particular objectives of the project are to qualify a set of standard all-steel beam-to-column joints, develop pre-qualification charts and design tools that can be easily used by designers. The project is also intended as a pre-normative research aimed at proposing relevant design criteria to be included in the next version of EC8. Besides it would contribute to the advancement of knowledge in the field of seismic behavior of steel moment resisting joints usually adopted in moment resisting frames (MR), in un-braced bays of dual moment-resisting/concentrically braced frames (MR+CB) and in moment-resisting/eccentrically-braced frames (MR+EB).

Short description of the project

The project is the first attempt in Europe to produce qualification tools for seismic-resistant joints. Novel design methodologies and details for beam-to-column connections that are reliable, feasible and economical, solving also the open issue of design by testing required by EC8 for partial strength/stiffness connections will be provided. The cyclic behavior of beam-to-column joints has a crucial role on the overall seismic response of both MR and dual frames. Recent studies highlighted the influence of joint rotation capacity on the seismic response of mid-rise MR frames designed according to EC8.
The innovative content of the project is represented by:

- Experimental investigations on 96 beam-to-column joint specimens covering: three typical European typologies and one US dog-bone joint typology made of heavy cross sections;
- Evaluation of the influence of different parameters (e.g. axial force, loading protocol and member sizes) on the joint performance;
- Development of codified pre-qualification charts of typical beam-to-column joints used in EU practice.



In Europe these tools do not exist in design codes. Hence, this project was intended as pre-normative research aiming to propose design guidelines for the future version of EC8.

Project implemented by

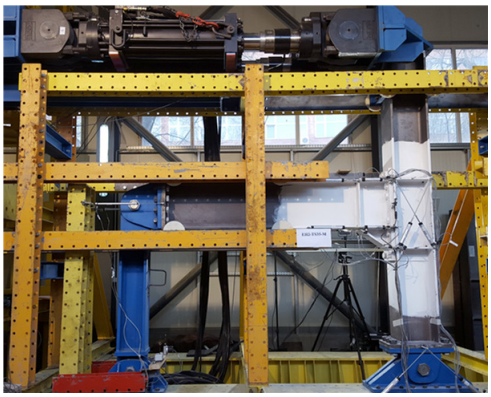
University of Naples "Federico II", Department of Structures for Engineering and Architecture.

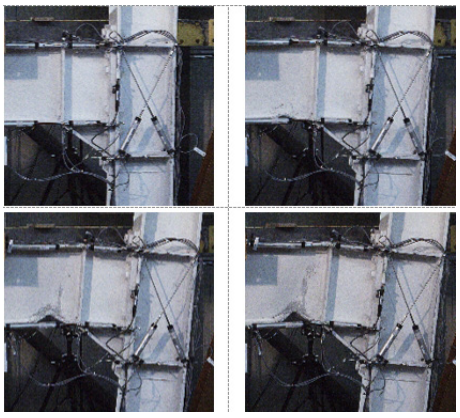
Implementation period

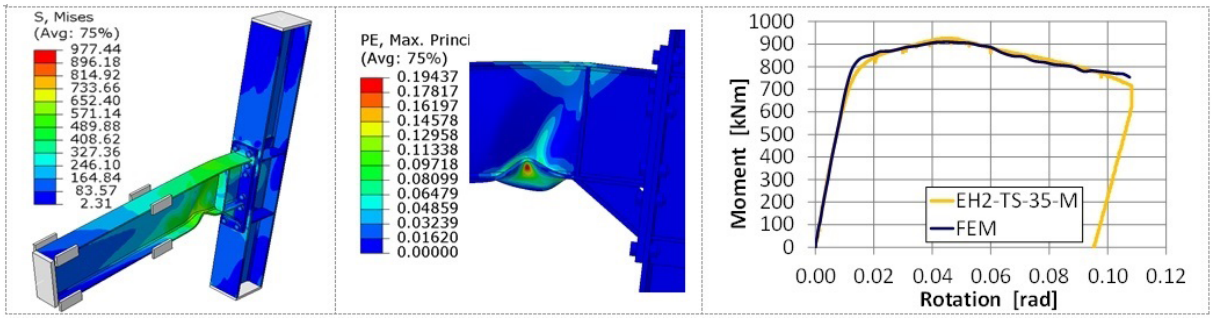
01.07.2013 – 31.06.2016

Main activities

Regarding the aim and objectives of the project, extensive experimental and numerical (FE) investigations were carried out with the purpose of evaluating the designed beam-to-column joint assemblies, and the influence of several parameters. The monotonic and cyclic response of 24 beam-to-column joints was evaluated. The numerical simulations comprised the calibration of joint models based on test results, and extension of the experimental program with a parametrical study.







Results

Particular results are represented by the experimental pre-qualification of bolted beam-to-column haunched connections. The numerical calibration of joint models allowed for a better understanding of the load transfer mechanism. The parametric study allowed investigating the influence of: member size, haunch geometry, web panel strength, and cyclic loading. Based on the experimental and numerical investigations, the design procedure was validated.

Applicability and transferability of the results

The project provides easy-to-use design tools for engineers and promotes saving cost solutions. Particular outcomes of the project are intended to be introduced within the new version of European seismic design code EN 1998-1. In addition, the outcomes of the project will be largely beneficial for the EU industry. Because the US joints examined within EQUALJOINTS will be made of heavy sections, which are produced only in Europe, this will be an important opportunity to get on the US Market, consolidating the gain of EU economy and having beneficial impact to exportation of EU products. The impact and transferability of the project is by no means restricted to the selected joint configurations and this project will open the door for other joints to be included in future updates of the guidelines.

Financed through/by

Research Fund for Coal and Steel, grant agreement RFSR-CT-2013 – 00021.

Research Centre

The Research Centre for Mechanics of Materials and Structural Safety – CEMSIG, Politehnica University of Timisoara.

Research Team

- University of Naples "Federico II" (UNINA) (coordinator of the project)
- Imperial College (IC)
- University of Coimbra (UC)
- University of Liege (ULg)
- Politehnica University of Timisoara (UPT)
- European Convention for Constructional Steelwork (ECCS)
- ArcelorMittal Belval & Differdange S.A. (AM)
- CORDIOLI & C

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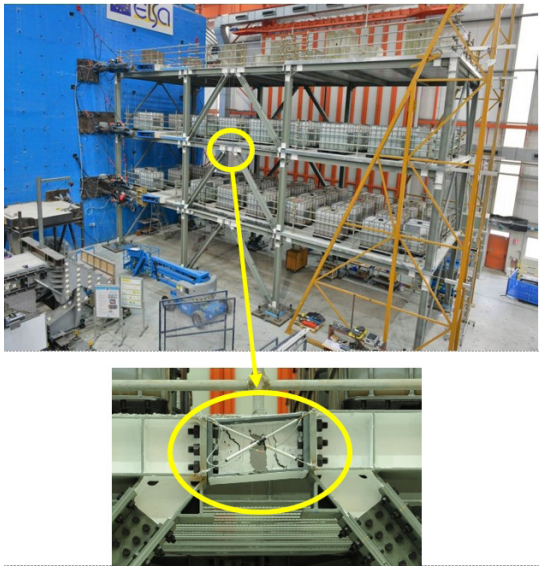
VALORIZATION OF INNOVATIVE ANTI-SEISMIC DEVICES (INNOSEIS)

Goal of the project

As a result of three RFCS-, one EU- and two nationally funded research projects, 12 innovative replaceable steel-based devices have been developed that improve the response of structures during earthquakes by enhancing their energy dissipation capacity. This project aims at transferring the relevant knowledge from research to practice by the production of several documents and the organization of seminars and workshops.

Short description of the project

UPT is responsible for valorization of removable bolted links and replaceable shear panels concepts.



Project implemented by

NATIONAL TECHNICAL UNIVERSITY OF ATHENS – NTUA, Institute of Steel Structures

Implementation period

01.07.2016 – 31.12.2017

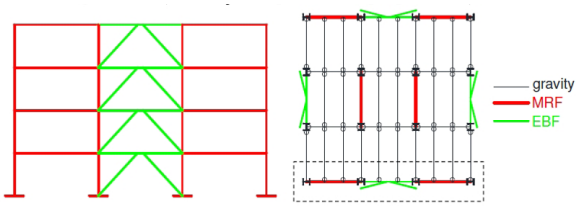
Main activities

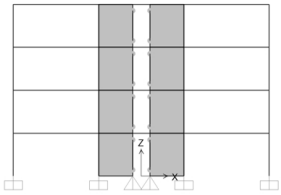
The work to be carried out will be subdivided in 6 work packages.

- WP 1 will collect and critically review all material available for the anticipated devices. Information brochures will be produced separately for each innovative device and then put together to form a single volume.
- WP 2 will produce a document that defines a methodology for reliably quantifying values of the behavior factors q for use in seismic design.
- WP 3 will clarify which devices must be qualified in accordance with EN 15129 for anti-seismic devices.
- WP 4 will deal with detailed case studies of buildings in which the innovative devices are employed.
- WP 5 is devoted to seminars, workshops and other dissemination actions.
- WP 6 is the work package for management of the project.

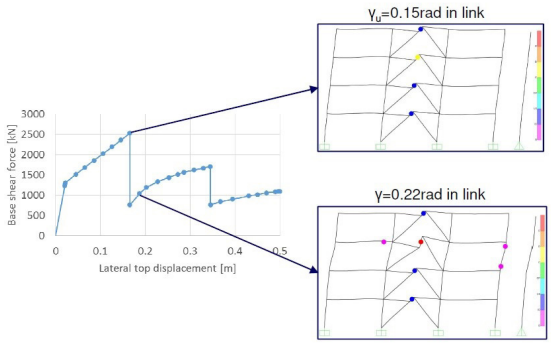
Results

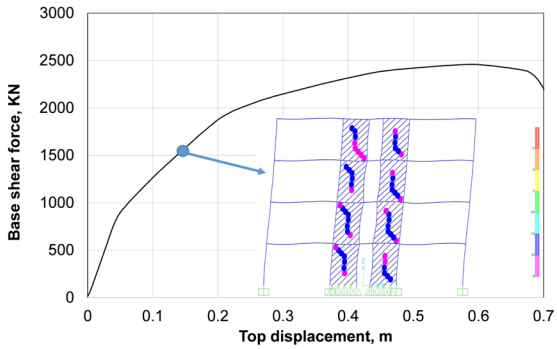
4 stories buildings, in which replaceable bolted links and replaceable shear panels are employed, were designed (spectral analysis) by UPT, in two different design cases: moderate seismicity case (ag=0.15g) considering Medium Ductility Class and high seismicity case (ag=0.30g) considering High Ductility Class.





Additional to Eurocode current design, the structures were conceived as dual structures with re-centering capacity. The EBF building has very short removable links with connection kept elastic. The SPSW has two thin steel plates and stanchions as vertical boundary element in the interior span.
In order to verify the re-centering capability and to assess the seismic performance and feasibility of these structures, static nonlinear (pushover) analyses were performed.





Financed through/by

Research Fund for Coal and Steel, grant agreement RFCS-02-2015 number 709434

Applicability and transferability of the results

- Promotion of innovation in the design of buildings in seismic areas
- Enhancement of structural safety against the governing natural hazard in large parts of Europe.
- Improvement in life cycle costs and sustainability due to the reduction of seismic losses.
- Contribution to the increase in market share for steel, especially in areas of moderate to high seismicity where steel is underrepresented.
- Provision of more alternatives for architectural and structural design of new and existing buildings by increasing the number of code-approved structural systems for steel and composite structures.

Research Centre

The Research Centre for Mechanics of Materials and Structural Safety – CEMSIG, Politehnica University of Timisoara.

Research Team

- UNIVERSITATEA POLITEHNICA TIMISOARA (UPT)
- POLITECNICO DI MILANO (POLIMI)
- UNIVERSITA DEGLI STUDI DI NAPOLI FEDERICO II. (UNINA)
- UNIVERSITA DI PISA (UNIPI)
- RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN (RWTH)
- INSTITUTO SUPERIOR TECNICO (IST)
- UNIVERSITET PO ARCHITEKTURA STROITELSTVO I GEODEZIJA (UACEG)
- UNIVERSITEIT HASSELT (UHasselt)
- MAURER SOHNE ENGINEERING GmbH & CO KG (MSE)
- CONVENTION EUROPEENNE DE LA CONSTRUCTION METALLIQUE ASBL (ECCS)

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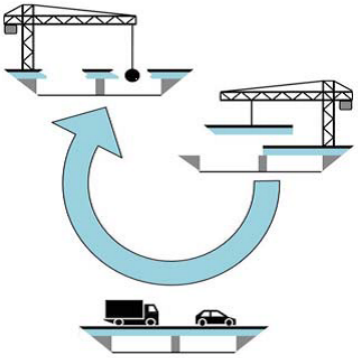
VALORISATION OF KNOWLEDGE FOR SUSTAINABLE STEEL-COMPOSITE BRIDGES IN BUILT ENVIRONMENT - SBRIPLUS

Goal of the project

Within the RFCS project SBRI, a holistic approach to assess steel-composite bridges by combining Life Cycle Assessment (LCA), Life Cycle Costs (LCC) and Life Cycle Performance (LCP) was developed and applied to some representative bridges. This project aims at the valorisation, dissemination and extension of the developed method for advanced applications and further bridge types. To reach a wide audience among engineers and authorities, two Design Manuals and a software tool will be disseminated in the frame of several seminars across Europe.



Sketch of the life-cycle of a bridge

Short description of the project

The aim of SBRIplus project is to promote the developed knowledge and design methodologies by combining the LCA, LCC and LCP analyses along the entire life-cycle of bridges.

Project implemented by

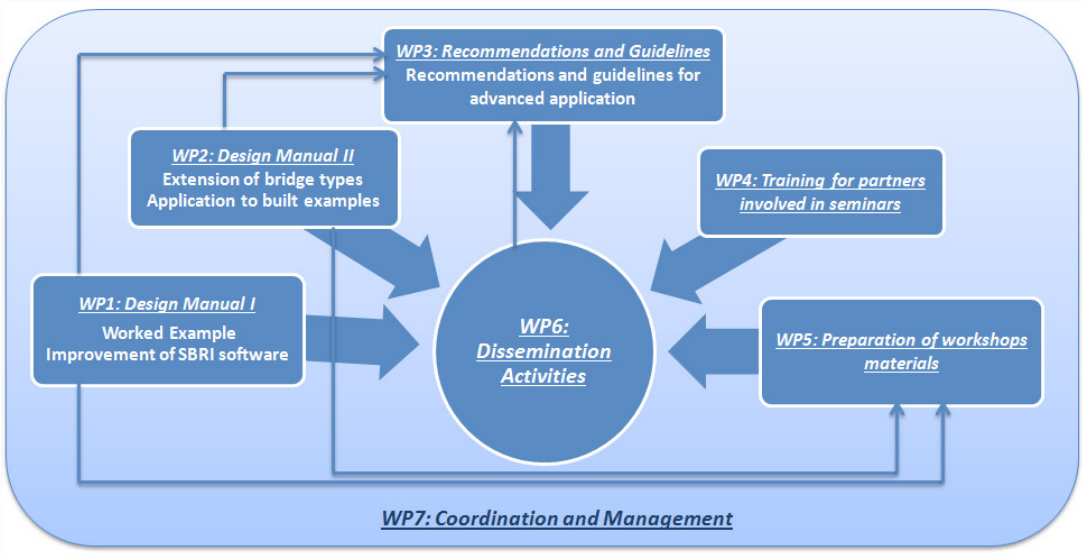
ArcelorMittal Belval & Differdange S.A., Luxembourg

Implementation period

01.07.2016 – 31.06.2018

Main activities

1. Explanation of methodology and background by elaboration of worked examples and improvement of the SBRI-tool;
2. Extension of bridge types by advanced application to innovative bridges across Europe demonstrating the flexibility and applicability of the methods developed;
3. Dissemination activities (11 European languages, organization of 13 workshops);
4. Providing of recommendations for advanced applications and guidelines for bridge authorities;
5. To provide recommendations summing up and concluding the analyses and being the bases for guidelines to be elaborated for bridge authorities.



The 7 Work Packages (WPs) of the SBRIplus project

Results

Two design manuals will be prepared and translated in 11 European languages and distributed within the planned dissemination activities. The first Design Manual includes background information on the methodology and worked examples for easy application with the help of the improved software tool. By analyses of built examples, the SBRI method will be applied to innovative bridge solutions, the results and the conclusions being shown in the second Design Manual.

The seminars around Europe will offer the opportunity to present not only the results of the SBRIplus project, but also the advanced application to innovative solutions in addition to national regulations and practice.

The location of the seminars around Europe

Applicability and transferability of the results

As bridges are an integral part of the European-wide traffic infrastructure, being of vital importance for society, the amount of steel used in the construction of steel and steel-composite bridges represents an important market for the steel industry. The application of a sustainable life cycle design of bridges causes an increased steel consumption. As currently the decisive criteria at tender stage are the minimum construction costs, the needed and promoted shift to a sustainable life cycle decision making, brings the steel-composite bridges forward. The advantages of low environmental inputs, low life cycle costs and low user costs for the entire life cycle are combined in sustainable steel-composite structures. The major objective of the proposal is to valorize and transfer the knowledge gained in the SBRIplus project into practice and thus to make it available to a broad audience along engineers, authorities, bridge operators and designers.

Financed through/by

Research Fund for Coal and Steel
Total budget of "SBRIplus" project (grant agreement No 710068): 675.047 €
Budget of the Politehnica University of Timisoara: 41.983 €

Research Centre

Research Center for Mechanics of Materials and Structural Safety (CEMSIG), Politehnica University of Timişoara
Research Institute for Renewable Energy (ICER-TM), Politehnica University of Timişoara

Research Team

ArcelorMittal Belval & Differdange SA (Luxembourg);
University of Stuttgart (Germany);
University of Coimbra (Portugal);
Aktien-Gesellschaft der Dillinger Hüttenwerke AG (Germany);
Institut Francais des Sciences et Technologies des Transports, de l'Amenagement et des Reseaux (France);
RAMBOLL Sverige AB (Sweden);
BRISA Engenharia e Gestao SA (Portugal);
FOSTA -Forschungsvereinigung Stahlanwendung e.V. (Germany);
Politehnica University of Timisoara (Romania);
Ceske Vysoke Uceni Technike V Praze (Czech Republic);
Fundacion Tecnalia Research & Innovation (Spain);
University of Naples Federico II (Italy);
ATKINS Consultants Limited (UK);
Stichting Bouwen met Staal (Netherlands);
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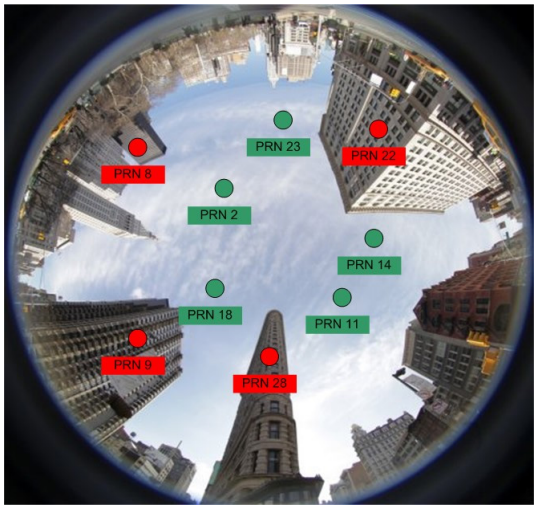
QUALITY OF SERVICES IMPROVEMENT FOR GNSS LOCALISATION IN CONSTRAINED ENVIRONMENT BY IMAGE FUSING TECHNIQUES (IMFUSING)

Goal of the project

The Line of Sight (LoS) of a satellite could be disrupted by obstacles, reducing the accuracy of the information provided to a Global Navigation Satellite System (GNSS) receiver. The first objective of the project is to eliminate or weight the signals coming from these satellites. To simplify the identification of satellites having a direct LoS with the GNSS receiver, this project proposes, as a supplementary sensor, to use a fish eye camera.



Original image.
The satellites were marked at Thales-Alenia.

Segmentation result
(the non sky region is colored in black)
obtained applying an original segmentation method.

Short description of the project

To provide sufficient information to the GNSS receiver, at the image processing level, the algorithms conceived will include the calibration of the camera sensor, image segmentation techniques, and distance and angle measurements deduced from calibrated image analysis. The algorithms at user sensor level will use camera information to discard measurements, will estimate boundaries of accuracy, will build a Quality of Service (QoS) indicator on the computed position and will authenticate the position. The algorithms at tracking loop level will use camera information to adjust the GNSS receiver correlator.

Project implemented by

- UPT as contractor
- Thales-Alenia Toulouse France as subcontractor

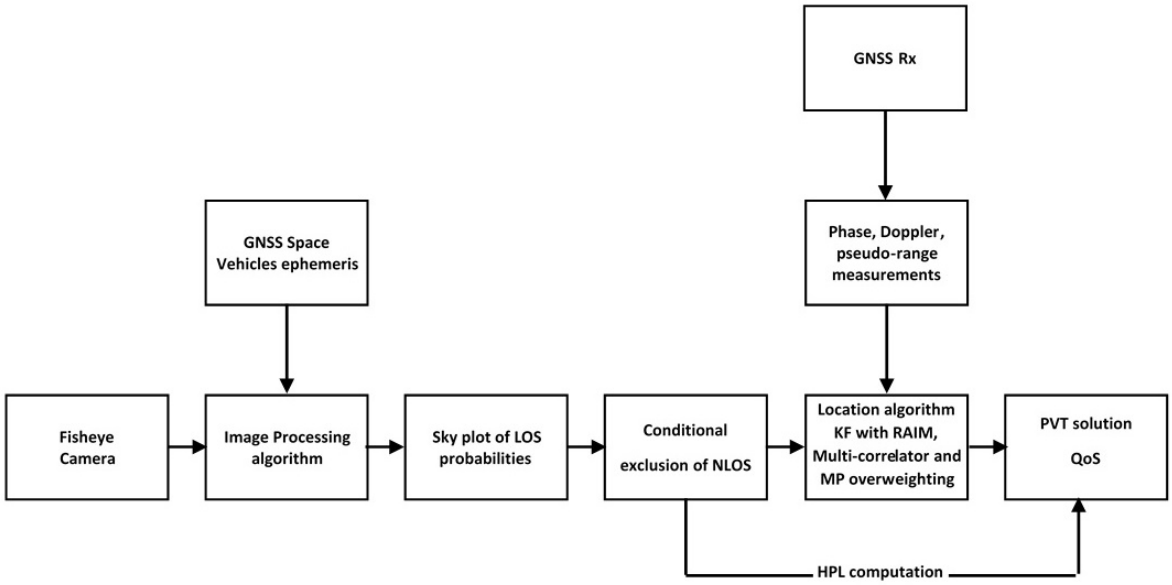
Implementation period

October 1 2014 – March 30 2017

Main activities

Phase I 01/10/2014–31/08/2015: State of the art analysis (already validated),
Phase II September 1 2015 – March 31 2017

- 01/09/2015–30/11/2015: Core technical development (already validated)
- 01/12/2015-31/01/2016: Test campaign (carried out)
- 01/12/2015-31/05/2016: Performance analysis (pending validation)
- 01/06/2016-30/09/2016: Dissemination and exploitation.



IMFUSING algorithm architecture final solution

Results

Deliverables:
Report on the State of the art in Image-GNSS fusion, Preliminary Design Review Report, Test Review Board Report, MATLAB codes for developed algorithms.

Dissemination:
Scientific paper in a scientific journal, Technical Note on synthesis of the study.

A first dissemination result:
Naforniță C., David C., Isar A., Preliminary results on sky segmentation, Proceedings of 2015 International Symposium Signals Circuits and Systems, 9-10 July 2015, Iasi, Romania, pp. 1-4, 10.1109/ISSCS.2015.7203933, Print ISBN: 978-1-4673-7487-3

Applicability and transferability of the results

The subject was evaluated at the start at technology maturity level 1 (Scientific Research), and it is aimed to conclude the project at technology readiness level (TRL) 3 (Laboratory Experiments).

Financed through/by

European Space Agency (ESA), contract number 10031/02.08.2013
- UPT: 128.234 EURO,
- Thales Alenia: 70.000 EURO

Research centre

Intelligent Signal Processing

Research team

Prof. Miranda NAFORNIȚĂ, PhD
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Prof. Andrei CÂMPEANU, PhD
Prof. Ioan NAFORNIȚĂ, PhD
Prof. Marius OTEȘTEANU, PhD
Prof. Vasile GUI, PhD
Prof. Alexandru ISAR, PhD
Assist. Prof Ciprian DAVID, PhD

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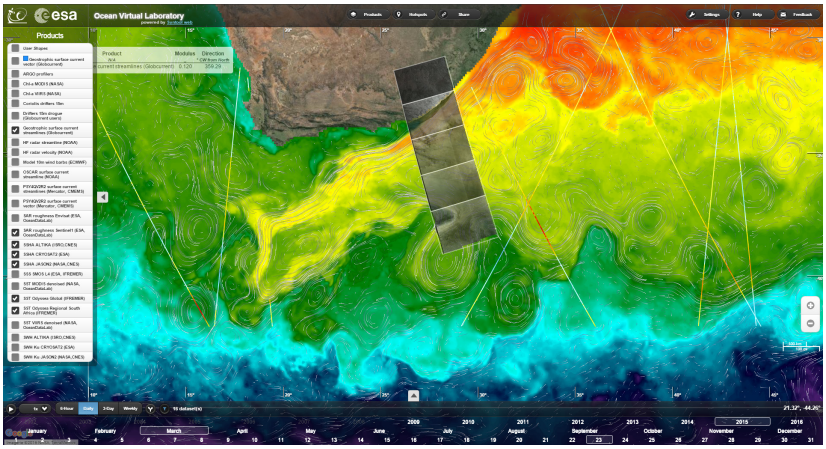
SY4SCI SYNERGY STUDY: OCEAN VIRTUAL LABORATORY

Goal of the project

The project allows oceanography experts to discover the existence and then to handle jointly, in a convenient, flexible and intuitive way, the various co-located Earth Observed (EO) datasets and related model/in-situ datasets over dedicated regions of interest with a different multi facet point of view. The developed tools shall foster the emergence and prototype of new methods and products making use of the complementarity between sensors to study ocean related processes.



Short description of the project

The project aims to implement new software putting together two types of tools: a mathematical programming environment and a geographical programming environment.

The principal tasks are the following.

- Implementation the SY-4Sci OVL novel synergy algorithms and the OVL platform, perform validation of new synergy products and access Sentinel1 and Sentinel3 products suitability for synergy studies.

- Write recommendation for further scientific research exploiting the synergy between ocean satellite sensors with a special focus on Sentinel1 and Sentinel3.

Implementation period

October, 24, 2014 – October, 27, 2016.

Project implemented by

- OceanDataLab, Brest, France - Contractor
- Institut Francais de Recherche pour l'Exploitation de la MER (IFREMER), Brest, France - Subcontractor
- Nansen Environmental and Remote Sensing Center (NERSC), Bergen, Norway - Subcontractor
- Politehnica University ofTimisoara (UPT), Romania - Subcontractor
- Institute of Oceanology of the Polish Academy of Sciences (IO PAN), Sopot, Poland - Subcontractor
- Plymouth Marine Laboratory (PML), Plymouth, UK - Subcontractor

Main activities

- Review of existing synergy methods and consolidation of requirements
- Define new methods and algorithms
- Selection and preparation of EO products database
- Specification and implementation of the prototype platform and processing modules
- Validation of the developed tools and products
- Recommendations for further scientific research.

Results

Deliverables

- Requirements Baseline,
- Algorithm Theoretical Basis document,
- Product Specification document,
- Product Validation Report,
- Software User Manual.

Dissemination

- Publications,
- Presentations,
- Training Courses.

Applicability and transferability of the results

The subject is evaluated today at technology maturity level 1 and it is aimed to conclude the project at technology readiness level 3.

Financed through/by

- European Space Agency (ESA), ESRIN/Contract N° 4000112389/14/I-NB – consortium 250000 EURO,
- UPT: 24713 EURO.

Research centre

Research Centre for Intelligent Signal Processing (ISPRC)

Research team

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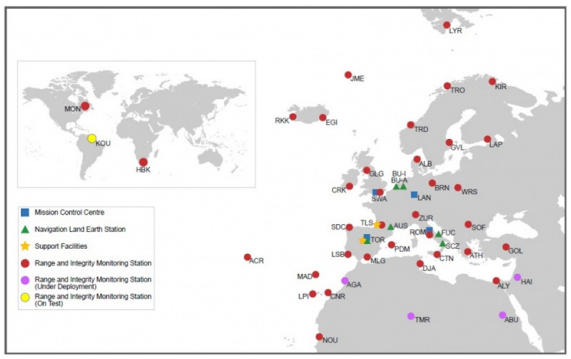
STUDY FOR A MONITORING STATION FOR EGNOS TO SUPPORT SERVICES IN EASTERN EUROPE

Goal of the project

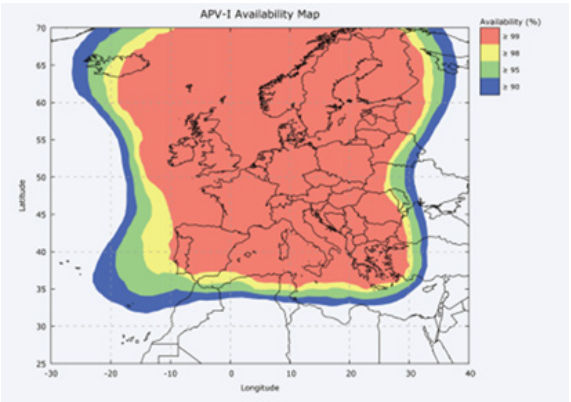
The objective of the study is the automatic reporting of EGNOS performance over Romania as well as the assessment of corrections transmitted by other SBAS.

Short description of the project

Due to its geographical location, Romania is an ideal candidate for system performance monitoring at the border of EGNOS service area. Receivers placed in most parts of Romania will be able to track, in addition to EGNOS, also the Russian Federation's System for Differential Corrections and Monitoring (SDCM) and India's GPS Aided GEO Augmented Navigation system (GAGAN).
The Contractor will implement within ESA regulatory framework and based on ECSS standards, all activities related to: an automatic reporting of EGNOS performance over Romania and Assessment of other SBAS visible from Romania.
The Contractor is requested to deploy a monitoring site network for the EGNOS service and all GNSS systems within Romania and Archive data for remote access by the Agency.



EGNOS RIMS Sites



EGNOS Service Area according to
ESSP Service Definition Document v3.0

Implementation period

Sep 19 2016 – Sep 19 2017

Project implemented by

- Politehnica University of Timisoara (UPT) - Contractor
- Alenia Toulouse France - Subcontractor
- Pildo Labs Spain - Subcontractor

Main activities

- Management
- Site Ranking
- Site Selection
- Deployment
- Automatic Reporting & Performance Comparison
- Communication

Results

Deliverables

- Site Selection Justification Document
- Volume Simulation Plan
- Service Volume Simulation Report
- Hardware Deployment Plan
- Hardware Deployment Report
- Project Management Plan
- Executive Summary Report
- Financial Report
- Final Report
- Contract Closure Summary

Dissemination:

- Scientific paper in a scientific journal
- Technical Note on synthesis of the study

Applicability and transferability of the results

The subject is evaluated today at technology maturity level 1 (Scientific Research), and it is aimed to conclude the project at technology readiness level (TRL) 6 Model demonstrating the critical functions of the element in a relevant environment.

Financed through/by

- European Space Agency (ESA), contract number No. 4000 117 527 / 16/NL/CBi – UPT: 115000 EURO
- Thales Alenia: 15000 EURO
- Pildo Labs: 20000 EURO

Research centre

Research Centre for Intelligent Signal Processing (ISPRC)

Research team

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Prof. Alexandru Isar
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Prof. Marius Oteşteanu;
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