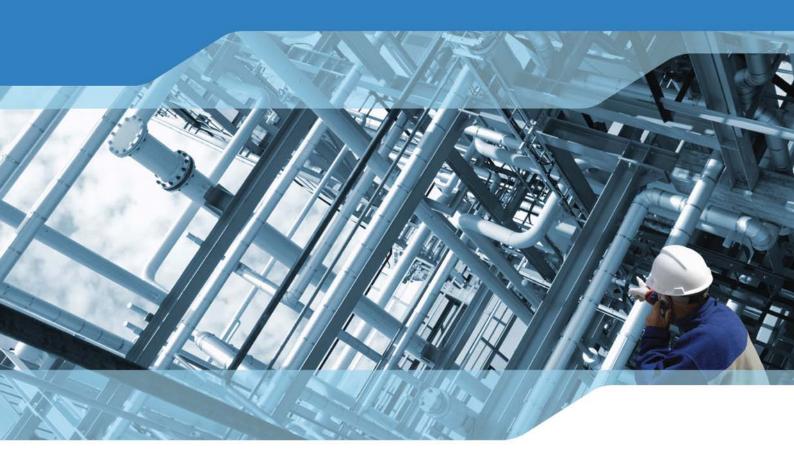
# EURO MAINTENANCE



## **Maintenance Excellence for Sustainable Development**

21<sup>st</sup> European Congress on Maintenance and Asset Management 14-16 May 2012

Sava Centar, Belgrade





## Message from EUROMAINTENANCE 2012 Congress President



Dear Congress delegates,

I am pleased to welcome you to EuroMaintenance 2012 Congress.

EuroMaintenance is an initiative from the EFNMS, the European Federation of National Maintenance Societies for more than 40 years and 21<sup>st</sup> edition of this Conference and Exhibition is organized by Serbian Maintenance Association DOTS.

We have invested efforts to create a lifetime Congress event by gathering together:

Top speakers and best practice cases from around the world

**Different types of industry** covering all aspects of Maintenance & Asset Management **Innovative concepts and information ready to use.** 

It doesn't matter what level of experience you have with maintenance - there is something here for everyone and always more than you expect. Maintenance professionals from all over the world will acquaint themselves with the latest technical developments in the area of maintenance and industrial servicing as well as measurement, control technologies and environmental control.

Beside all the possibilities for networking, we will have over 90 Paper Presentations from Maintenance and Asset Management Professionals combined with four interesting industrial visits including related workshops in Asset Management, Benchmarking and Risk Assessment.

This international event will bring on important issues of maintenance community with purpose to stimulate reflection and debate the challenges and solutions and therefore it represents a unique opportunity to learn from the best how to turn Maintenance & Reliability into key drivers for the Sustainability & Profitability of your company in a global market.

I am sure that your stay in Serbia will be enjoyable and professionally profitable.

*Miloš Petrović*EUROMAINTENANCE 2012 Congress President

## **EUROMAINTENANCE 2012 organisation**



**DOTS**, the Serbian Maintenance Association, is a dynamic non-profit organisation for Maintenance Professionals in Serbia, addressing both maintenance managers in the industry and the suppliers of maintenance services and related products. The mission of DOTS is to create a larger awareness and appreciation for maintenance activities and the responsible maintenance managers, by sharing knowledge on maintenance, production reliability & asset management.

**DOTS** has established an extensive network of maintenance professionals in the Serbian Industry. Lots of members, but also non-members participate at the frequently organized sessions for sharing best practices in maintenance execution, planning & scheduling. More information on www.dots.rs.



The EFNMS, the European Federation of National Maintenance Societies, is an non-profit umbrella organisation for the non-profit National Maintenance Societies in Europe. The EFNMS wants to contribute to the improvement of maintenance for the benefit of the people of Europe. By the term 'maintenance' is meant: the combination of all technical, administrative, and managerial actions during the lifecycle of an item intended to retain or restore it to a state in which it can perform its required function. Maintenance is of the most importance for trade and commerce, for the environment, and for general health and safety.

## Day One May 14th

08.00 - 16.00	Registration	*
---------------	--------------	---

#### 09.30 - 11.00 Opening ceremony with Welcome cocktail - Hall 1

	Hall 1	Room 4	Room 5	Room 6
11.30 - 13.00	Maintenance	Reliability	Information	Asset
Parallel sessions	Management	Engineering	Systems	Management
13.00 - 14.00	Lunch - Exibition Area	1		
14.00 - 16.00	Maintenance	Education, training & validation	Health, Safety,	Maintenance
Parallel sessions	Management		Environment	Technology
16.00 - 16.30	Coffee Break - Exhibition Area			
16.30 - 18.00		Maintenance	Information	Asset
Parallel sessions		Concepts	Systems	Management

## Day Two May 15<sup>th</sup>

WHOLE DAY EXHIBITION in conjunction with the Conference A true meeting and networking point for Delegates

08.00 - 16.00	Registration *			
	Hall 1/B	Room 4	Room 5	Room 6
09.00 - 11.00 Parallel sessions	Maintenance Assessment	Maintenance Technology	Maintenance Concepts	Reliability Engineering
11.00 - 11.15	Coffee Break - Exhibit	ion Area		
11.15 - 13.15 Parallel sessions	Maintenance Concepts	Maintenance Technology	Maintenance Assessment	Reliability Engineering
13.15 - 14.15	Lunch - Exibition Area	1		
14.15 - 16.15 Parallel sessions	Maintenance Assessment	Maintenance Technology	Maintenance Concepts	Reliability Engineering / Planning & Scheduling
18.00 - 19.30	Congress event - Behind the scene of aircraft maintenance - Hall 1			
19.30	Congress Dinner - Ex	hibition Area		
		WHOLE DAY EXHIBI	TION in conjunction	with the Conference

## Day Three May 16<sup>th</sup>

**/HOLE DAY EXHIBITION** in conjunction with the Conference A true meeting and networking point for Delegates

Parallel workshops	Half day workshops with the world's leading maintenance & reliability specialists at industrial locations in Belgrade area.
09.00 - 15.00	EFNMS Benchmarking workshop
10.00 - 15.00	EFNMS Physical Asset Management workshop
11.00 - 15.00	Risk Assessment Management with Maintenance Plan develonment workshon

<sup>\*</sup> Registration will be open before offical strat of the Congress, on Sunday May 13, 2012 from 12.00 - 16.00



#### KEY NOTE SPEAKERS AT THE OPENING CEREMONY



#### Dr Jezdimir Knežević

World class researcher, educator, entrepreneur, founder and president of the "MIRCE Akademy", Exeter, UK

Dr Knežević regularly provides services to private and public sector organisations regarding their short and long term reliability, logistics, maintenance, system engineering, cost and effectiveness needs.

He has received several international awards for his contribution to research and education.



European Agency for Safety and Health

#### MAINTENANCE - MANAGEMENT OF FAILURES AND PROVISION OF PROFIT

This is the new concept of maintenance for members of "Boards of Directors" in all companies in the world and all others who do not understand what maintenance is. However, this is an intuitive concept of maintenance for those who do understand what is it. This opening presentation will focus on the challenge that is facing the maintenance community daily, which is the necessity for simultaneous management of maintenance activities related to system failures, on one hand and the continuous provision of revenue generating functions, on the other. For this to be achieved, a full understanding of the impact of maintenance on both functions is essential. However, this is far from the current situation where the "Boards of Directors" in every company in the world are maximising efforts to minimise maintenance costs. Hence, the main objective of this presentation is to show how the science based quantitative relationship between the Euro paid for maintenance and the Euro earned from the revenue generated function has been established to enable a trade-off that maximises the profit.

By the end of the presentation it will become obvious why Maintenance must have a seat on "Boards of Directors" of companies. Hence, the only unanswered question will be: "Why the EuroMaintenance Congress did not come to Belgrade earlier?"



**Katalin Sas**Project Manager
European Agency for Safety and Health at Work (EU-OSHA)

Katalin Sas is working as project manager in the Prevention and Research Unit of the European Agency for Safety and Health at Work (EU-OSHA) and is responsible, among others, for the content related issues of the European Campaign on Safe maintenance. Between 2002 and 2009, before she joined EU-OSHA, she worked in research and project management for different OSH related projects at the Finnish Institute of Occupational Health.

#### MAINTENANCE AND SAFETY AND HEALTH AT WORK - A EUROPEAN CAMPAIGN ON SAFE MAINTENANCE

The European Agency for Safety and Health at Work (EU-OSHA) has been running European Campaigns since 2000. The EU-OSHA Healthy Workplaces Campaigns have two main objectives: first, to raise awareness of an important issue in occupational health and safety, and secondly, to bring together people who have an interest in making Europe's workplaces safer, to exchange ideas and learn from examples of good practice in order to show how, practically, health and safety problems can be overcome. Maintenance was the theme of the Healthy Workplaces Campaign 2010-11. During the two years of the campaign, the EU-OSHA and its networks and partners in the 27 EU Member States organised a wide range of activities at the national and European level, to promote safe maintenance.

The EU-OSHA campaign had two main messages. Firstly, that maintenance is essential to keep the working envronment safe and reliable - lack of maintenance or inadequate maintenance can cause serious accidents or health problems.

Secondly, maintenance itself is a high-risk activity and it has to be performed in a safe way, with appropriate protection of maintenance workers and other people present in the workplace.

With the campaign, EU-OSHA aimed to raise awareness of the importance of maintenance for workers' safety and health and of the risks associated with maintenance and in the same time, encourage employers to consider health and safety aspects in maintenance management. Over the course of the Campaign, hundreds of activities were organised at national level by the EU-OSHA network of national Focal Points, especially during the European Weeks in October every year. For the Safe Maintenance Campaign, 53 organisations took up the Campaign Partnership offer to become official Campaign Partners, among



others the European Federation of National Maintenance Societies (EFNMS). In return for their involvement in the Campaign, the Agency was able to give them high-profile recognition of their efforts, and access to the campaigning resources. During the Campaign, the official Campaign partners have been organising all kinds of awareness-raising activities, training sessions and workshops, seminars and conferences.

The EU-OSHA Safe Maintenance website has been made available in 24 languages. Other materials that EU-OSHA created for the Campaign include factsheets and reports, leaflets and posters, and the Agency also distributed a maintenance-themed DVD featuring the cartoon character NAPO. Again, the European Good Practice Awards was organised to collect good practice examples from across Europe, this time on the safe maintenance theme. The Awards honour enterprises and organisations that have made outstanding and innovative contributions to promoting safe maintenance. From the 40 entries that we received from 23 countries, eight received awards at a ceremony organised in Budapest. For more information about the Campaign and about safe maintenance visit EU-OSHA website: http://osha.europa.eu/en

# EUROMAINTENANCE 2012 Major Accomplishments to Be Awarded

For more than two decades the European Federation of National Maintenance Societies (EFNMS) together with Salvetti Foundation has been awarding major accomplishments in maintenance and asset management. These major European awards will be given in opening session at EUROMAINTENANCE 2012 event in Belgrade, Serbia.

During EUROMAINTENANCE 2012 EFNMS will grant awards on different accomplishments in maintenance and asset management. It is the joint objective of the EFNMS, Salvetti Foundation and the whole European maintenance community to find the best and most innovative ideas and persons to be awarded. The awards are sponsored by the Salvetti Foundation.

**EUROMAINTENANCE Incentive Award** will be honored to individual, team or institution as the recognition of extraordinary accomplishment in the field of maintenance. The award will be granted as the acknowledgement of outstanding performance, new ideas in maintenance, innovations on applying new technology or new methods, new organizational innovations to improve the effectiveness of maintenance, publications and presentations that will promote or assist in making maintenance better known and any other initiatives that will add to the progress made in our profession.

**EFNMS Excellence Award for Master Thesis** in Maintenance will be granted for the students from the EFNMS member countries. The purpose of the excellence award is to promote, encourage and motivate the Theoretical and Applied research and applications of research outcomes in the areas of Maintenance Engineering and Management amongst the students of the European Universities and Institutes.





09.30 - 11.00 OPENING CEREMONY

Day one - May 14th

Mr. Franco Santini, EFNMS Honorary President

Mr. Miloš Petrović, Congress President

Mr. Alexander Stuber, EFNMS Chairman

Dr Jezdimir Knežević, MIRCE Akademy speaking of Maintenance - Management of Failures and Provision of Profit

Ms. Katalin Sas, European Agency for Safety and Health at Work speaking of Safe Maintenance Campaign result

Mr. Werner Tschuschke, Salvetti Foundation - handing out prestigious maintenance prizes to

Winner of EuroMaintenance Incentive Award

for exceptional achievements in maintenance and contribution to the sector &

Winner of EFNMS Excellence Award for best Master Thesis in maintenance

11.00 - 11.30 Welcome Cocktail - Exhibition Area

11.30 - 13.00 Parallel sessions / rooms: Hall 1, 4, 5, 6

MAINTENANCE MANAGEMENT - Room: Hall 1

- 11.30 Expectations, Challenges, Achievements The Maintenance Contribution by Mr. Jan Franlund UTEK Sweden
- **12.00** Positive and negative aspect in application of Maintenance management philosophy by Mrs. Hana Pacaiova Technical University of Kosice Slovakia
- **12.30** A Maintenance modeling to assess the availability and the maintenance costs of multi components systems by Mr. Antoine Despujols EDF (Electricité de France) France

RELIABILITY ENGINEERING - Room: 4

- 11.30 Improving Reliability and Maintenance Through Cultural Change by Mr. Ian Knight Enluse BV Netherlands
- 12.00 Best Practice in shutdown Planning and Scheduling by Mr. Gert Mueller T.A. Cook Consultants Germany
- 12.30 Energy Efficiency=Reliability: The New Equation for Optimized Performance by Mr. Michael Roberts SKF USA

**INFORMATION SYSTEMS - Room: 5** 

- 11.30 Information in Maintenance The Decision Making Support by Mr. Tomás Pedro Clemente Trigo MIIT Portugal
- **12.00 Case Study: Maintenance & Social Networking how to dramatically raise productivity** by Mr. Thom Quintin IDSL Switzerland
- **12.30** Just in Time Dynamic & Cost-effective Maintenance for more Reliable Production: Case Studies by Mr. Al-Najjar Basim Linnaeus University Sweden

**ASSET MANAGEMENT- Room: 6** 

- **11.30** European Asset Management Practices: the results of EFNMS asset management survey by Mr. Kari Komonen Finnish Maintenance Society Finland
- **12.00 Impact of Facility and Asset Management in Croatia**by Mrs. Ljiljana Katičić HDO Hrvatsko društvo održavatelja Croatia
- **12.30 Pharmaceutical Asset Management Maturity** by Mr. Coolen Vincent Tebodin Netherlands

13.00 - 14.00 Lunch - Exhibition Area

14.00 - 16.00 Parallel sessions / rooms: Hall 1, 4, 5, 6

MAINTENANCE MANAGEMENT - Room: Hall 1

- **14.00** Choosing the right maintenance strategies to achieve desired results from maintenance systems and objectives by Mr. Ísleifsson, Bjarni Ellert Manager, PwC Canada, Consulting & Deals
- **14.30** Achieving Sustainable development through Maintenance Excellence by Mr. Aditya Parida Luleå University of Technology Sweden
- 15.00 "Virtual workshop" a use of virtual techniques as a base of supporting of technical means use and maintenance in accordance with the conception of human centered philosophy by Mr. Wieczorek Andrzej Silesian University of Technology, Faculty of Organization and Management Poland
- **15.30 Modeling of Maintenance Management on the Basis of Given Operative Availability** by Mr. Avdić Hasan University of Tuzla, Faculty of Mechanical Engineering Bosnia and Herzegovina



#### EDUCATION, TRAINING, VALIDATION - Room: 4

#### 14.00 New European vocational education and training in Maintenance

by Mr. Ingemar Andréason - EFNMS Training Committee member - Sweden

#### 14.30 Maintenance Engineering - study programme development

by Mr. Ales Zdenek - University of Life Sciences Prague - Czech Republic

15.00 The Prestigious Certificates from EFNMS by Mr. Jan Franlund - UTEK - Sweden

#### 15.30 The Training System of TnPM with Hierarchical Modules

by Mr. Li Baowen - Industrial & Plant Engineering Institute of Guangzhou University - China

#### HEALTH, SAFETY & ENVIRONMENT – Room 5

14.00 The Basics of Safe Maintenance by Mr. Wim Vancauwenberghe - BEMAS - Belgium

### **14.30 PARI Maintenance: French Safety Software dedicated to Maintenance Operations**

by Mr. Gerard Neyret - AFIM – France

#### 15.00 Future Safety lab - "Do the right thing"

by Mr. Hans Van Selm - Dutch Maintenance Society (NVDO) - Netherlands

15.30 An innovative web service for risk assessment in maintenance by Mr. Georgios Skroumpelos - ACRM S.A. – Greece

#### MAINTENANCE TECHNOLOGY - Room: 6

14.00 How to start condition monitoring by Mr. Patrick Pilat - XIOS hogeschool Limburg - Belgium

#### 14.30 A low cost Mudbus system for predictive maintenance

by Mr. Luis Ferreira - Univesidade do Porto, FEUP - Portugal

15.00 Intelligent Malfunction Prognostics by Mr. Frank Kirchnick - Cassantec Ltd. - Switzerland

15.30 Optimized Condition Monitoring by Mr. Oscar van Dijk - SKF - Netherlands

16.00 - 16.30 Coffee break - Exhibition Area

#### 16.30 - 18.30 Parallel sessions / rooms: Hall 1, 4, 5, 6

#### **MAINTENANCE CONCEPTS - Room: 4**

16.30 Providing outsourced O&M Services to large power plants by Mr. Ilkka Toijala - Fortum - Finland

17.00 Challenging Countries by Mr. Dear Bryarlie - Saipem - France

**17.30 Incentive Issues in Outsourced Maintenance Supply Networks: A Delphi study in the Process Industry** by Mr. Henk Akkermans - Dutch Institute for World ClassManagement - Netherlands

#### **INFORMATION SYSTEMS - Room: 5**

**16.30** Use of geospatial information for supporting maintenance management in a technical network system by Mr. Andrzej Loska - The Silesian University of Technology - Poland

17.00 RAMS implementation for railways by Mr. Per Kristian Norddal - Marintek - Norway

#### 17.30 Central Maintenance Database - The Key to Benchmarking

by Mr. Joao Carlos Taborda Amaral e Craveiro - MIIT – Portugal

#### **ASSET MANAGEMENT - Room: 6**

**16.30** Maintenance, Engineering and Production as Manufacturing Team by Mr. Petri Wolfgang- Drpetriconsulting - Germany

17.00 Asset Management Policy and Strategy by Mr. Jos Van der Aelst - Stork Technical Services - Belgium

#### 17.30 Case Study: Optimising Estates Maintenance

by Mrs. Shimona Shodipo - Investment and Infrastructure Services - United Kingdom

Day two - May 15<sup>th</sup>

09.00 - 11.00 Parallel session Rooms: Hall 1/B, 4, 5, 6

#### MAINTENANCE ASSESSMENT - Room: Hall 1/B

**09.00 Qualified Key Indicators Processing** by Mr. Christer Olsson - ColMaint AB - Sweden

**09.30 EFNMS-SMRP Maintenance and Reliability Indicator Harmonization Project - 4th Edition** by Mr. Tom Svantesson - TSMC Production and Maintenance Consultants - Denmark

10.00 Maintenance & Reliability Metrics KPI: Unraveling the Mystery by Mr. Ricky Smith - GPAllied - USA

10.30 The Status-quo and Characteristics of Chinese Enterprises Maintenance Audit
Assessment by Mr. Xu Baoqiang - Industrial & Plant Engineering Institute of Guangzhou University,
Guangzhou Shareford Maintenance Consulting Co. Ltd. - China

#### MAINTENANCE TECHNOLOGY - Room: 4

09.00 New Power Plant Turbine Cleaning - Technology by TEKE by Mr. Esa Moilanen - TEKE Oy - Finland

**09.30 Underwater Survey for Large Immersed Structures, Tunnels and Pipes** by Mr. Gérard Douchet - Electricité de France / R&D - France

10.00 Proactive maintenance of pneumatics by Mr. Gradimir Danon - Faculty of Forestry - Serbia

10.30 Vibration Measurements - More Than Only Spectra by Mr. Johan Van Puyenbroeck - Emerson Process Management - Belgiun

#### **MAINTENANCE CONCEPTS - Room: 5**

**09.00 How to avoid Condition Monitoring not being profitable in your plant** by Mr. Sas Jos - GPAllied - Belgium

09.30 Models for successful implementation the "Japanese systems" by Mr. György Péczely - A.A. Stadium Ltd. - Hungary

10.00 Maintenance partnerships a win-win model for successful outsourcing by Mr. Erich Meyer - BIS Chemserv GmbH - Austria

10.30 Vendor Relationship Management (VRM) by Mr. Krishnamurthy Ramani - Resources Management Consultant - India

#### **RELIABILITY ENGINEERING - Room: 6**

#### 09.00 An Approach to Optimization of Warranty Policy-Case Study

by Mr. Dragan Stamenković - Faculty of Mechanical Engineering – Serbia

09.30 Estimation of component redundancy in optimal age maintenance

by Mr. Jorge Siopa - ESTG, CDRSP, Polytechnic Institute of Leiria - Portugal

10.00 Analysis of the Effect of Random Failures on the Reliability and Availability of a Large System using Simulation by Mr. Jacobus Krige Visser - University of Pretoria - South Afrika

**10.30** On the warranty management and the customer relationship in Distribution Network Service Providers by Mr. Vicente Gonzalez - University of Seville - Spain

11.00 - 11.15 Coffee break - Exhibition Area

11.15 - 13.15 Parallel sessions / rooms: Hall 1/B, 4, 5, 6

#### MAINTENANCE ASSESSMENT- Room: Hall 1/B

- 11.15 Lessons Learned from Reliability and Maintenance Benchmarking What does world class performance look like? by Mr. Al Poling HSB Solomon Associates USA
- **11.45** Maintenance audits based on qualitative and quantitative elements by Mr. Diego Galar Luleå University of Technology Sweden
- 12.15 A test of the importance of supportability by Mr. Chris Rijsdijk Hogeschool Zeeland Netherlands
- 12.45 Fuzzy Access to Dependability Assessment by Mr. Miloš Tanasijević Faculty of Mining and Geology Serbia

#### MAINTENANCE TECHNOLOGY - Room: 4

- **11.15** Objective and uniform condition assessment for infrastructure, industry, real estate and energy supplies by Mr. Donald Bezemer D.O.N. Bureau Netherlands
- **11.45 Condition monitoring best practices in wind power generation** by Mr. Severino Marchetti ISE Industrial Service Engineering Italy
- 12.15 10 Steps in Lubrication Reliability to achieve World Class Maintenance by Mr. Toon Van Grunderbeeck Lubretec byba Belgium

#### **MAINTENANCE CONCEPTS - Room: 5**

**11.15 Value Oriented Maintenance - The strategic dimension of the spanner** by Mr. Nils Blechschmidt - ConMoto Consulting Group GmbH - Germany

- 11.45 Quality Centered Maintenance (QCM); The concept by Mr. Damir Mihajlović Nortura SA Norway
- 12.15 Lessons from the Front Lines of the Operator Care Program by Mr. Michael Gehloff GPAllied USA



#### **RELIABILITY ENGINEERING - Room: 6**

- **11.15** Systemic assessment and analysis of factors affect the reliability of a wind turbine by Mr. Emmanouil Konstantinidis Democritus University of Thrace Greece
- **11.45** Proposed implementation of RCM method for maintenance of bogies of railway passenger wagons by Mr. Vladimir Stuchly University of Zilina Slovakia
- **12.15** Failure Analysis and Risk Management The Experience of a Brazilian

  Power Generation Company by Mr. Ali Kassem Copel Geração e Transmissão S/A Brazil
- **12.45** Inspection Based on Reliability: Defining the time of inspection periods based on reliability growth analysis by Mr. Eduardo Calixto Petrobras Brazil
- 13.15 14.15 Lunch Exhibition Area
- 14.15 16.15 Parallel sessions / rooms: Hall 1/B, 4, 5, 6

#### MAINTENANCE ASSESSMENT - Room: Hall 1/B

- 14.15 Maintenance for CERNs cryogenic installations, strategies, methods, cases by Mr. Goran Perinić CERN Switzerland
- 14.45 Middelfart case free energy savings by Mr. Hans Jorgen Knudsen Middelfart Municipality Denmark
- **15.15** Improving Reliability-based Maintenance Culture in the Printing Industry in Practice by Mr. Csaba Hotvath Nyomda Technika Kft. Hungary
- 15.45 Optimum maintenance using knowledge from a complete product population by Mr. Ulf Sandberg University West-Sweden

#### MAINTENANCE TECHNOLOGY - Room: 4

- **14.15** Best condition monitoring practices -real application on an Italian cement mill by Mr. Francesco Caropreso Sitia Engineering S.r.l. Italy
- 14.45 Proactive monitoring system for basic mining equipment at open pit mines of Electric Power Industry of Serbia by Mr. Predrag Jovančić Faculty of Mining and Geology Serbia
- 15.15 The Development of Online Leak Sealing Technology and its Efficiency Exertion by Mr. Wendy Zhao TXY-Tech China
- 15.45 Grab-Ship unloader 05 (DN05) reliability report by Mr. Patrick Noé dos Santos Filgueira VALE S/A Brazil

#### **MAINTENANCE CONCEPTS - Room: 5**

- **14.15** Reengineering in Maintenance. Chances, challenges and methods to success by Mr. Ioannis Manopoulos Atlantis Engineering Greece
- **14.45** An Effective and Efficient Model for the Selection of Maintenance Strategy by Mr. Ashraf Labib University of Portsmouth UK
- 15.15 TnPM implementation in CNLC Iran Branch by Mr. Yuxin Wang Great Wall Drilling Corp. China
- **15.45** The strategic importance of storage tank maintenance, a case by Mr. Peter Desmaretz Stork Technical Services Belgium

#### **RELIABILITY ENGINEERING - Room: 6**

- **14.15 Effective Spare Parts Management** by Mr. Tomas Hladik LOGIO S.R.O Czech Republic
- 14.45 Lubrication Reliability Practices for Improved Equipment Reliability by Mr. Ian Knight Enluse BV Netherlands
- **15.15 Making a maintenance plan by using mathematical model and Gams** by Mr. Ozgur Kakmaci ETİ GRUP OF COMPANIES Turkey
- 15.45 Bearing wear monitoring by ultrasound conditi on-based lubricati on by Mr. Renato Trevisan Braskem Brazil

#### 18.00 - 19.30 CONGRESS EVENT - Behind the scene of aircraft maintenance

#### Exciting debate about the strategies, techniques and best practice within Aircraft Maintenance

Dr Jezdimir Knežević, MIRCE Akademy, Exeter, UK - Debate moderator

Mr Andy Johnson, Head of Line Maintenance at Flybe

Mr. Radoslav Ilić, Head of Maintenence, JAT Tehnika

5 Best Congress Papers Awards Ceremony by Mr. Werner Tschuschke, Salvetti Foundation

Handover Ceremony to the next Euromaintenance Host City - Belgrade hands over to Helsinki

Presentation of the next EuroMaintenance 2014 Congress - Helsinki, Finland, 2014

19.30 - 22.00 Congress Dinner - Exibition Area

#### KEY NOTE SPEAKERS AT THE OPENING CEREMONY



**Mr. Andy Johnson**Director of Engineering
Flybe



Mr. Andy Johnson is currently working as Director of Engineering for Flybe Finland in Helsinki.

Previously he was engaged as Head of Line Maintenance looking after a fleet of 74 Aircraft, some 300 engineers at 18 Airports including 3 maintenance hangars.

Mr. Johnson has been in the aviation industry for 36 years and was the engineering project manager that saw Flybe UK become the world's first operator of the Embraer 195 aircraft which is now delivering an annual WATOG dispatch figure of 99.3%.

#### SHEDULED MAINTENANCE A NECESSARY EVIL

Presentation **SHEDULED MAINTENANCE A NECESSARY EVIL** will show how we can all review what we do and find more efficient ways to operate. It will help the attendees to learn a little bit about each other, a little bit about Flybe and its culture and more importantly about increasing Aircraft Availability and improving Capability.

The presentation covers how Flybe has looked at its operation and details some of the ways Flybe identified of increasing Aircraft availability.



**Mr. Radoslav Ilić**Head Maintenance, Marketing & Sales
Jat Tehnika



He has been working in aviation maintenance industry for 15 years and was engaged in different engineering projects. One of the most important has been the implementation of EASA 145 Certificate in Jat Tehnika, ltd. Nowadays, he is responsible for developing and implementing a strategy that supports the Company's objectives and growth plan; selling heavy, line and field maintenance services; in compliance with EASA standards.

#### Jat Tehnika - ONE STOP INTEGRATED MRO SYSTEM

Jat Tehnika is one of the oldest and best equipped integrated civil aircraft MRO system in the South Eastern Europe, which can provide the vast variety of maintenance services for Boeing B737 Classic / NG and ATR 42/ 72. Starting the summer season 2012, first line maintenance activities on A320 family will be performed in this facility. Its capability covers line / base-heavy maintenance, engine shop visit, engine test cell, NDT testing, undercarriage overhaul, back shop components repair and overhaul.

Also, the attendees will be acquainted with basic MRO - Jat Tehnika organization scheme, main safety and quality certificates in civil aviation maintenance issued by European Aviation Safety Agency (EASA) and USA Federal Aviation Administration (FAA).

#### FIVE BEST PAPERS AWARD

Best Five Papers Award at the EuroMaintenance congress is awarded in five categories:

- Asset Management
- Maintenance Management
- Maintenance Technologies
- Maintenance Assessment
- Safety, Health & Environment



The award is presented on the basis of a "popular vote" by the attendees of the presentations. Sponsored by the **Salvetti Foundation**.



# Your asset integrity is our core activity

Your operations have enough challenges. The last thing you want is downtime. So it's vitally important to keep critical plant and equipment working optimally. That is exactly the strength of Stork Technical Services. We help our customers in the chemical, process, oil & gas and power industries to make the difference. We combine 'Thinking and Doing' in asset integrity management. We offer you a single point of contact for a unique total solution. Ranging from plant maintenance and monitoring, through to advising on and implementing methods for working more efficiently, more cost-effectively, more safely and more sustainably.





## Day three May 16<sup>th</sup>

#### EFNMS Benchmarking workshop

The EFNMS benchmarking workshop for maintenance will provide training and practice in the calculation and understanding of the indicators for measuring maintenance, cost, reliability and availability performance.

The challenge in benchmarking for maintenance is to clearly define what is included in the different components of the KPI's. That is why the maintenance workshop will be based on the harmonized indicators from the standard EN 15341 "Maintenance Key Performance Indicators", and the metrics from the SMRP Best Practices Committee. By using this predefined indicators and metrics you will easily be able to do benchmarking and comparative analysis with other companies inside our outside the corporation.

At the workshop, you will be have the opportunity to calculate a number of key figures for maintenance cost, maintenance man hours and availability performance. The calculations will be made on case-study companies or you will be invited to bring your company's data for maintenance and availability performance and calculate the values at the workshop.

#### Workshop objectives:

- To increase the understanding of benchmarking for maintenance
- To learn the definitions and the use of the harmonized maintenance indicators
- To disseminate knowledge and share best practices in maintenance

#### The key learning points:

- Maintenance terminology and definitions
- Use of the standardized indicators/metrics to measure maintenance cost performance, maintenance man hours and availability performance
- Interpretation of the performance measured by each indicator for maintenance cost performance and team discussions to increase the understanding of the key performance behind the indicators in maintenance economic, technical, organizational



**Workshop Facilitator:** 

**Mr. Tom Svantesson,**TSMC Production and Maintenance Consultants and member of the European Maintenance Assessment Committee



**Industrial visit:**Belgrade Waterworks and Severage

## EFNMS Physical Asset Management workshop

The EFNMS Physical Asset Management workshop will provide lessons learned from the asset management survey carrie out by the EFNMS Asset Management Committee (EAMC). It also offers participants an opportunity to participate in the new round of the survey.

The workshop will also offer the best practices and lessons learned from practical asset managers. The workshop covers following topics:

- 1. introduction to Physical Asset Management, and activities and organizations which can be found in the field of Asset Management,
- 2. the results of EFNMS Asset Management survey from the year 2011 and 2012,
- 3. conclusions how these results affect the asset managers within the process industry,
- 4. what the road to be a world class asset manager requires,
- 5. what are the lessons learned from the perspective of practical asset managers,
- 6. how well do I know my organization: getting acquainted with the survey questions



© EFNMS vzw

## Day three May 16<sup>th</sup>

The workshop will have an interactive character. Presentations will challenge audience with questions and feedback will be given based on group discussions.

The key learning points:

Management system

managers

asset manager

what is Physical Asset Management

where from we can find the terminology, relevant

definitions and requirements for effective Physical Asset

best practices from the perspective of experienced asset

which road I should follow to became a world class level

#### Workshop objectives:

- To improve understanding of Physical Asset Management
- · To learn from each other
- To disseminate knowledge and share the best practices



**Workshop Facilitator:** 

#### **Mr. Kari Komonen**, Chairman of EFNMS asset management committee and Board member of Finnish Maintenance Society-Promaint



Industrial visit: JAT TEHNIKA, Belgrade

# Risk assessment management with maintenance plan development

The risk assessment management workshop will provide training and practice in the evaluation and understanding of the indicators for measuring risk, maintenance, cost, reliability and availability performance.

It is a well - known fact that the existing maintenance management methods have the purpose of providing the desired reliability and availability of a system, at minimum cost. New maintenance concepts, which are increasingly applied in all areas of life, are based on risk, a complex category which immediately connects the likelihood of undesirable event occurrence with its consequences. In that respect, new risk-based maintenance methods are being developed, which, for the area of preventive maintenance according to the current state, represent a very important if not vital support to the existing maintenance methods.

At the conference workshop, you will be have the opportunity to calculate a number of key figures for risk analysis, maintenance cost and availability performance. The calculations will be made on case-study companies or you will be invited to bring your company's data for maintenance and availability performance and calculate the values at the workshop.

#### Workshop objectives:

- To increase the understanding of risk assessment and overall concept of risk
- To learn the definitions and the use of the main risk indicators
- To disseminate knowledge and share best practices in maintenance...

#### The key learning points:

- Risk management terminology and definitions
- Use of the standardized indicators/metrics to measure parametres of risk, maintenance and availability performance
- Development of a model of critical failure risk assessment, by implementing the concept of risk into maintenance management...



**Workshop Facilitator:** 

#### Dr Vladimir Popović,

Assistant professor, University of Belgrade, Faculty of Mechanical Engineering, Risk Expert (DOTS), Risk Examiners – Equipment Track (Certificate Nr. 16580 – 3/4/2010, Steinbeis University Berlin)



Industrial visit: Lasta Eurolines, Belgrade

## **Exhibition**

The Exhibition will be held in Sava Centar - Belgrade Congress Venue on May 14th and 15th 2012 in conjunction with the Conference on Maintenance and Asset management. All lunches, morning and afternoon refreshment breaks will be held in the Exhibition area, making it a true meeting point for delegates and exceptional opportunity for networking.















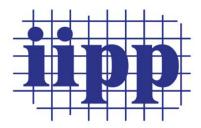








## Sponsors / Donators / Patrons



















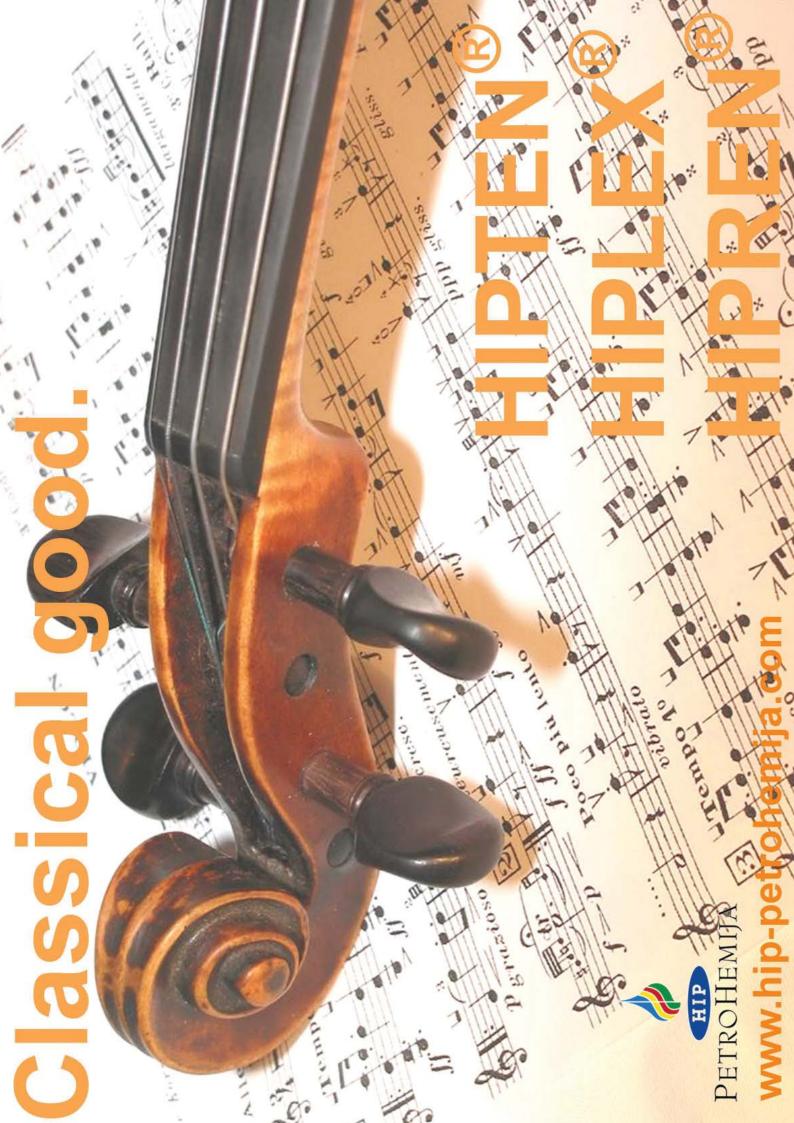


**Euro Sumar** 



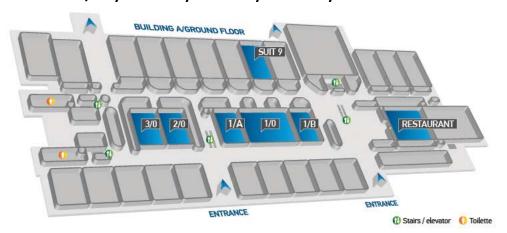






## Congress Venue Sava Center

#### Groud floor / Day one - May 14th & Day Two - May 15th



#### Day one

Registration

#### Hall 1

Opening Session/Parallel Session

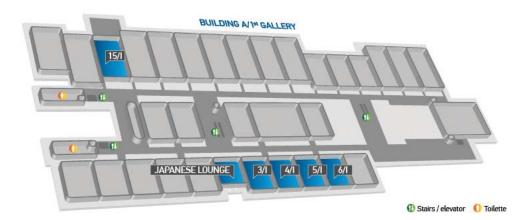
#### Day two

Registration

#### Hall 1/B

Congress Event/Parallel Session

#### Gallery / Day one - May 14th & Day Two - May 15th



#### Room 4

**Parallel Session** 

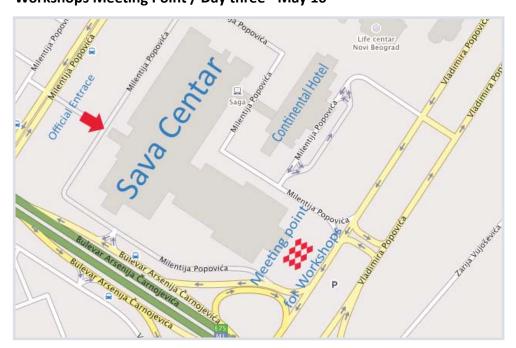
#### Room 5

**Parallel Session** 

#### Room 6

Parallel Session

#### Workshops Meeting Point / Day three - May 16th



#### **Benchmarking Workshop**

Time of departure: 09:00<sup>h</sup> am Time of return: 15:00<sup>h</sup> pm

#### **Physical Asset Management Workshop**

Time of departure: 10:00<sup>h</sup> am Time of return: 15:00<sup>h</sup> pm

#### **Risk Assesment Management Workshop**

Time of departure: 11:00<sup>h</sup> am Time of return: 15:00<sup>h</sup> pm

All departures and arrivals are from / to meeting point.

#### **Conference Coordination**

Mrs. Nada Stanojević

Serbian Maintenance Society DOTS Telephone: +381 11 6300750 Email: nstanojevic@iipp.rs