

# Industry Relations Activities

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**VP Industry Relations**  
**IEEE AESS BoG**  
**25-26 September,**  
**Marriott Park Hotel, Rome, IT**



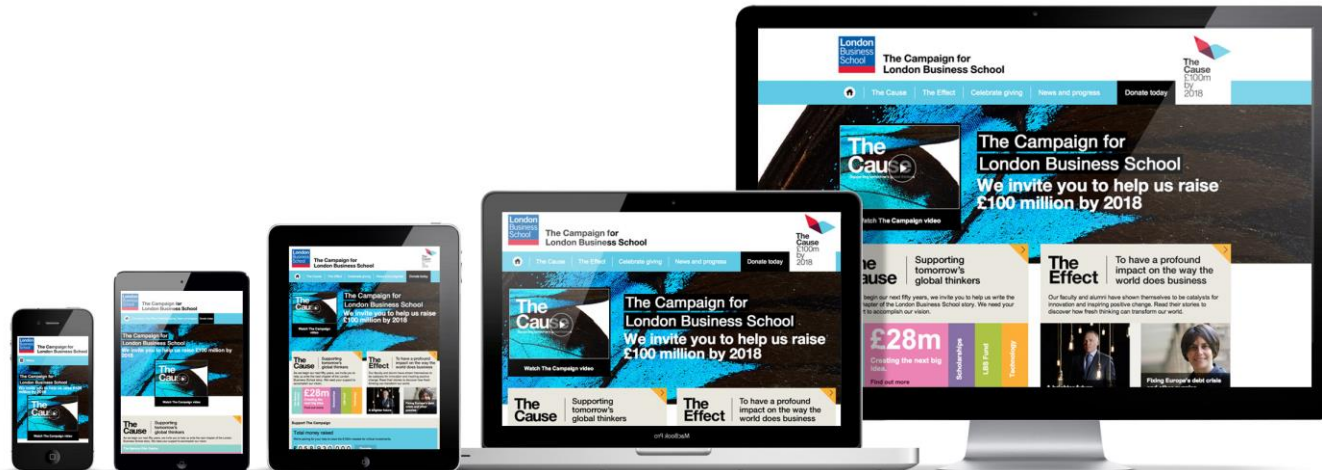
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# AIRW Updates: Technologies (1/2)

Responsive design has become a must:

**Google(\*)** announced that a **major update** to its mobile search algorithm has gone live Tuesday 21<sup>st</sup> April 2015.



\*From Tuesday 21<sup>st</sup> April, Google will start prioritizing **mobile-friendly websites** so, if your website is not mobile-friendly, it will be probably less prominent in any searches done on mobile phones, tablets, etc.

# AIRW Updates: Technologies (2/2)

AIRW has been designed, realized (free of charge) and delivered (CD) Sept.2014 using Joomla 2.5

## Update Joomla! 2.5.x

Joomla 2.5 is the previous version of Joomla, which was supported until December 31, 2014. For upgrade instructions to Joomla 3, please see the FAQs below.



**Upgrade Packages** Support ended December 31, 2014  
English (UK), 2.5.x to 2.5.28 Upgrade Packages, ZIP

Technology advances and New internet trends\* have taken place from the time of AIRW first release!

And even more awesomeness...

- Mobile R3ADY**  
Joomla! has taken a big leap into the mobile space with a total overhaul of both its frontend design and administrator interface.
- User Friendly**  
Joomla! administration has a friendly look and feel, built with the power of Bootstrap responsive framework, along with a touch of the awesome UI/UX work of the Joomla! JUX team.
- Developer Tools**  
(less) CSS and jQuery were added so you can write less code and use the IcoMoon font icon library, that provides a wealth of retina-optimized icons.
- Two Factor Authentication**  
Joomla was the first major CMS to implement two-factor authentication. Add a single-use code received on your cell phone or a Yubikey to your existing passwords to make your site extra hack-proof.

Discover every feature!  
[Set up a Joomla! demo site](#)

Timeline: Joomla! 1.5 (2008), Joomla! 2.0 (1.6) (2011), Joomla! 2.1 (1.7) (2011), Joomla! 2.5 (2012), Joomla! 3.0 (2012), Joomla! 3.1 (2013), Joomla! 3.2 (2013), Joomla! 3.3 (2014), Joomla! 3.4 (2014), Joomla! 3.5 (2015)

\* Joomla 2.5 is not supported anymore, new functionalities and security functions are supported by incoming Joomla 3.5

# AIRW updates: features

To take advantage of the new technologies and to put in place the best effort to achieve the results mentioned in the current Strategic Plan, a reviewed template and functional architecture for AIRW are highly recommended.

## Main proposed features:

1. **Industry partners site area (Announcements, Advertising and News from each Partner Company)**
2. **A collaborative site area (Technical articles, Collaboration proposal, Announces for: Scholarship, Jobs, Partnerships, Tradeshows, Events)**
3. **Payment System for: IEEE AESS membership, available online articles/books/databases related to industrial activities. *If an online payment method has already been set up the AIRW will exploit this facility.***

# Third Level vs New Domain Name

Once the main features have been approved a proper digital space should be given to host AIRW.

Two possible solutions are:

- a third level domain (for example [www.IR.ieee-aess.org/](http://www.IR.ieee-aess.org/)) with a DNS management service\*
- a new TLD (Top Level Domain) like either [www.airw.org](http://www.airw.org) or [www.ieee-airw.org](http://www.ieee-airw.org)

In both cases, a 'do-follow' link from [www.ieee-aess.org](http://www.ieee-aess.org) web site should be placed to guarantee PR (Page Rank) and Page Authority to the new web site.

BoG should agree on the preferred solution.

\*DNS : Domain Name Server

# Industry Relations Website Initiatives

- ❑ Could a first group of industry partners be selected?
- ❑ Should a “control” on contents be done following AESS guidelines?



- *Partner companies should manage freely their assigned AIRW web space*
- *AIRW should allow “auto-promotion”/“Advertising” on the published content*



- The collaborative space will contain:
  - **Technical articles (online first publication only, papers already published by AESS, databases, other sources), Collaboration proposal (for projects, studies, new publications);**
  - **Announces for: Scholarship, Jobs, Partnerships, Tradeshows, Events.**

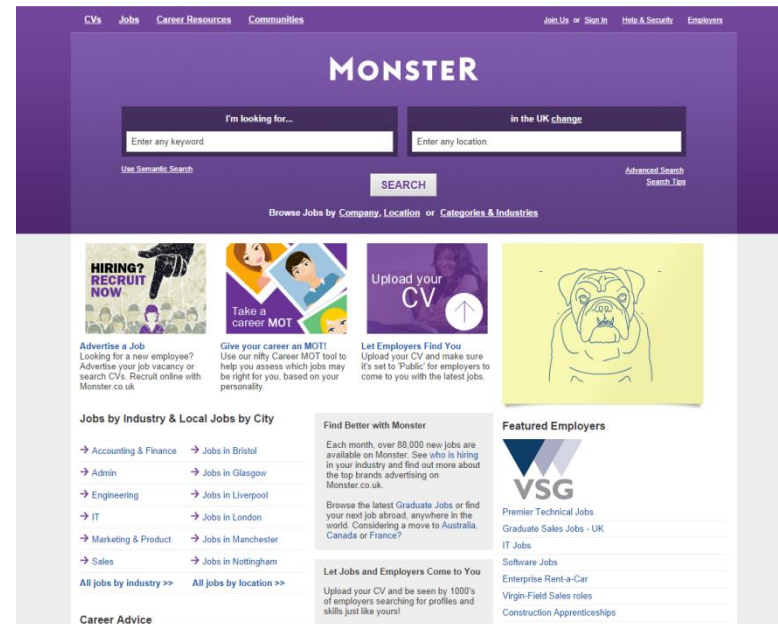
# AIRW job posting



The Job posting section can be managed directly from collaborating companies.

AIRW Website Job Posting section

AESS don't need to be competitive against monster.com or similar websites but can host a space for very specific job posting related to users interested in scientific and professional positions.





# AIRW cost details



As requested by Mr. Ron Ogan with the email dated 29th May 2015

# AIRW costs details *...after the free of charge startup!*

- Website developments (responsive design, up to date technologies, functionality improvements)  
**€ 7.500,00**
  - Basic SEO\* services for the AIRW to be indicized by principals Search Engines (Google, Bing, Yahoo)  
**€ 3.500,00**
  - Website technical updates & content publication (1Year)  
**€ 1.200,00**
  - Industry partners contacts management & help desk service (1Year)  
**€ 4.800,00**
- TOTAL** **€ 17.000,00** +VAT

\*SEO: Search Engine Optimization

# Spreading culture (1/4)

- One article just submitted to IEEE AESS SYSTEMS Magazine (Special Topic Industry Insights): first entry!!!!

## Management of R&D Investment Plan and Product Catalogue in a Modern Defense Systems Company

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**Abstract**—Some processes are central to the growth of a modern Company. This paper focusses on two such processes for product and technology portfolio management. The first process is for the preparation of an R&D (Research and Development) investment plan and the second is for the preparation of a product catalogue. Both these processes are crucial and significant attention to detail is required when preparing these documents. The purpose of this paper is to present the rationale and processes used for the development of a multi-year R&D investment plan, the review of on-going company funded R&D activities and the preparation of a product catalogue.

**Keywords**—investment, R&D, product catalogue, product appraisal, radar systems

### I. INTRODUCTION

The purpose of this paper is to present the rationale and the processes used for the following activities:

- ✓ Development of a multi-year R&D (Research & Development) investment plan.
- ✓ Review of on-going company funded R&D activities.
- ✓ Preparation of a product catalogue.

The processes described in this work do not refer to a specific company; on the contrary it is felt that they are valid for a notional modern defense systems company. These three activities are all interlinked because the development of new products, and hence their insertion into the product catalogue, is as a direct consequence of the investment strategy and the review of on-going R&D activities. The investment plan is particularly sensitive for the development of new radar AESA (Active Electronically Scanned Arrays) systems for a number of reasons:

- 1) The funds involved are very significant.
- 2) The programs take many years to be completed.
- 3) The Customer is always involved in many phases of the

their market competitiveness. To achieve this, a number of inputs are necessary, specifically:

- ✓ Company technology plan
- ✓ Company strategic plan
- ✓ Order intake plan

It is assumed that these three plans are available and have been approved by senior management.

A simplified view of the relationship between the three documents and the investment plan is illustrated in Figure 1 [1]. It should be noted that there is a cyclic relationship between these processes. This will be discussed further in the next sections. Business Units (BU) in Figure 1 represent different functions or departments that are responsible for achieving the defense systems company goals in terms of order in-take, revenue, margin and so on.



Figure 1 Relationship between different Company documents

- Database realized on Ramirez's books collection: a contribution in favour of IEEE System Magazine may be asked to Ramirez for publication on AIRW.

- A single list of the published reports offers a complete view to all industries who have to make decisions about areas where to invest in new products or updates

#	Subject	Explanation	Publication date	Aviation / Defence / Military
1	HOMELAND SECURITY MARKET FORECAST 2014-2024	Public Safety, Intelligence, Infrastructure, E		140308 Defence Industry Report
2	Aviation Security Market Forecast 2014-2024	Prospects for Leading Companies in Cargo,		140724 Aviation Industry Report
3	Critical Infrastructure Protection (CIP) Market Forecast	Cybersecurity, Perimeter Security, Surveilla		140922 Defence Industry Report
4	Air Traffic Control Equipment Market Forecast 2014-2024	Prospects for Next Generation Air Traffic C		140925 Defence/Aviation Industry Report
5	Governmental Geospatial Intelligence (GEOINT) Solu	Digital Mapping, Geographic Information S		141022 Defence Industry Report
6	The Electronic Warfare (EW) Market Forecast 2014-2024	Leading Companies in Electronic Attack (E		141028 Defence Industry Report
7	Civil Helicopter Maintenance, Repair and Overhaul (N//			141104 Aviation Industry Report
8	Commercial Aircraft Cabin Seating & Interiors Market	Advanced Materials & IFEC Technologies E		141107 Aviation Industry Report
9	Police & Law Enforcement Equipment Market 2015-21	Militarisation of the Police & Modernisatio		141120 Defence Industry Report
10	Civil Aviation Flight Simulation & Simulation Training	Prospects for Leading Companies		141202 Aviation Industry Report
11	Military Land Vehicle Electronics (Vetronics) Market	Leading Companies in Communications, Co		141205 Defence Industry Report
12	Commercial Aircraft Parts Manufacturer Approval (P	Non-OEM vs Non-OEM Licensed Parts		150115 Aviation Industry Report
13	Military Optronics, Surveillance & Sighting Systems	Personal Imaging Systems, Electro Optical		150202 Defence Industry Report
14	Cyber Security Market 2015-2025	Leading Companies in Network, Data, End		150226 Defence Industry Report
15	Military Radar Systems Market 2015-2025	Leading Companies in Airborne, Naval & L		150310 Defence/Aviation Industry Report
16	Commercial Aircraft Maintenance, Repair & Overhaul	Opportunities for Leading Companies		150320 Defence Industry Report
17	Aviation Cyber Security Market Forecast 2015-2025	Airlines, Airports, CRS/GDS & Air Traffic M		150326 Defence/Aviation Industry Report
18	Civil Helicopter Market Forecast 2015-2025	Commercial Prospects for Top Companies		150430 Aviation Industry Report
19	Small Unmanned Aerial Vehicle (UAV) Market Foreca	Micro, Mini & Nano UAVs for Military, Hor		150501 Military/Aviation Industry Report
20	Aerospace Composites Market Forecast 2015-2025	Top Companies in Commercial, Civil Aviat		150512 Aviation/Defence Industry Report
21	Distributed Fibre Optic Sensing (DFOS) Market 2015-	DAS, DTS & Other Sensors for Critical Infra		150521 Military/Aviation Industry Report
22	Non-Lethal Weapons Market Report 2015-2025	Less-Lethal Anti-Personnel & Anti-Vehicle		150528 Defence/Aviation Industry Report
23	Connected Aircraft Market Report 2015-2025	Ku-Band, Ka-Band & Air To Ground (ATG) Ir		150622 Aviation Industry Report
24	Commercial Aircraft Leasing Market Report 2015-202	Top Companies in Narrowbody, Widebody,		150720 Aviation Industry Report
25	Military Aircraft Maintenance, Repair & Overhaul (M	Top Companies in Heavy Airframe, Heavy		150724 Aviation Industry Report
26	Business Jet Market Report 2015-2025	Corporate Aviation Booming Due to Surge i		150730 Aviation Industry Report
27	CBRN Defence Market Forecast 2015-2025	Chemical, Biological, Radiological & Nucle		151210 Defence Industry Report

# Spreading culture (2/4)

- ✓ In the role of VP Industry Relations for AESS: **Session chairman and Industry PoC in the committee** at *Workshop on Compressed Sensing Theory and its Applications to Radar, Sonar and Remote Sensing (CoSeRA 2015)* 16-19, June 2015, Pisa, Italy.
- ✓ Technical program chair and session chairman at the 2nd IEEE AESS Workshop on Metrology for AeroSpace (MetroAeroSpace 2015), June 3-5, 2015, Benevento, Italy”.
- ✓ Role of “Private Sector Liaison Co-Chairs” organizing committee member. Acquisition of a gold sponsorship. Chairman of two sessions. IGARSS 2015, Milan, 26-31 July 2015, “*Remote Sensing: understanding the Earth for a safer world*”. (2300 attendees)
- ✓ First IEEE International Symposium on Systems Engineering, September 28-30, 2015 Rome, Marriott Hotel, A.Farina presenting: 30 September: “*The Domino Effect in Complex Systems: An Interdisciplinary View*”, E.Cianca (University of Rome Tor Vergata, Italy); M.De Sanctis (University of Rome "Tor Vergata", Italy); A.Farina; M.Coletta (University of Rome Tor Vergata - CTIF, Italy); M.Ruggieri (University of Roma Tor Vergata, Rome, Italy); P.Lindgren (Aarhus University Birk)
- ✓ Session chairman of EuRAD, EuMA 2015 Paris 06-11 September (1400 attendees): “*Innovative Doppler Radar Processing*”, Chair: B. Frederic, Thales Air Systems, Co-Chair: A.Farina, Selex ES

# Spreading culture (3/4)

- ✓ For: 2015 IEEE Radar Conference - Out of Africa - always something new, Johannesburg, 27-30 October 2015, member of technical committee for papers review.
- ✓ Panel organizer on “Metrology for Radar Systems”: The 3rd IEEE International Workshop on Metrology for AeroSpace will be held in Florence, Italy, June 22-23, 2016.
- ✓ Session organizer on “European Phased-array radar systems” for 2016 IEEE International Symposium on Phased Array Systems and Technology 18 - 21 October 2016 Watham, MA USA. Also International Liaison in the organizing committee.
- ✓ 12 October 2015 invited lecture at Tsinghua University Beijing on: “Radar Adaptivity: Antenna Based Signal Processing Techniques”, A. Farina.
- ✓ IET International Radar Conference 2015, Hangzhou (China): Keynote Speaker (A. Farina): “Cognitive Radar Signal Processing.”

# Spreading culture (4/4)

29 Feb/2016 – 3/Mar/2016 Accepted invitation by Professor Mohammad M. Nayebi to present at IWRS (International Workshop on Radar Sensing) 2016, Iran, Sharif University of Technology in Tehran:

✓ **Workshops:**

Radar adaptivity, antenna based signal processing techniques

✓ **Lectures:**

Cognitive Radar

✓ **Distinguished Lectures opportunities:**

Potential opportunities with invitation from Switzerland, IEEE AESS Section  
Same from IEEE AESS Section, Tunisi, Tunisia.

✓ **Foreseen publication in the July & August 2015 Issues - IEEE SYSTEMS MAGAZINE of:**

- A. Farina, L. Spinelli, "A friendly conversation with Princess Elettra Marconi".
- P. Daponte, A. Farina, "News & Information: "Impressions of the 2nd IEEE AESS Workshop on Metrology for AeroSpace (MetroAeroSpace 2015), July issue ".

✓ **Paper submitted** as a tutorial on the IEEE SYSTEMS MAGAZINE:

K. J. Sangston, A. Farina, "Looking Toward The Future Of Radar Detection In Non-Gaussian Clutter "

✓ **In preparation:**

"Death/mysterious ray", H. Griffith, A. Farina, and L. Spinelli, to submit to IEEE Systems Magazine.

# R.Oliva: Recent Questions and Answers

“Any methods that you can apply to dynamically modify the website via member inputs (blogs or other content) and/or semi-monthly or monthly updates that our team can implement may bring the cost into a range that the BOG will more likely embrace. ”

TBD. Which is the cost that BoG will more likely embrace?

“Is there a plan to pass costs to industry? I bet that a template could be created for advertising industry activities, objectives, and opportunities. Through our membership, costs could be more than defrayed for annual advertising for less than \$100 per page. I believe this could be accomplished with 5% membership participation. Something like this was discussed via Pubs 6 years ago...I don't think this was ever seriously pursued.”

A proper plan has to be established and a price list for adv can be decided by BoG.

“Ideally, some AIR-W link can be made live “before” Roma...thanks for the prompt reply and all you do for AESS, Roger”

Not possible if an appropriate web hosting space has not been set up (see p.6 of this presentation) and FTP(\*) access has not been released to us.

(\*) FTP: File Transfer Protocol

# Conclusions

- An up to date version of the AIRW has been proposed and the main features have been highlighted
- An internal procedure to periodically update the AIRW content will be proposed before launching website
- A detailed cost profile has been presented
- A formal BoG approval of the budget and of the activities is needed to proceed
- A list of the VP Industry Relations activities has been presented





# Questions?

# ■ BACKUP

# (1/2) Backup:summary of email conversation

with R. Oliva,J. Schamman,M. Greco, W. D. Blair

Alfonso ->Judy

Sept. 15, 2015 at 8:09 AM

Dear Judy,

as suggested by Roger Oliva (in copy), before the coming BoG Meeting in Rome, would be nice to host the template functionalities implemented in AIRW (AESS Industry Relations Website) in a IEEE hosting space connected to [ieee-aess.org](http://ieee-aess.org).

**Would be nice to have a "trial space" as a third level domain like "airw.ieee-aess.org" or similar.**  
In addition to the webspace we need a mysql database.

Is it possible to get ftp access and administrative rights for a similar domain and database through you?

Sept. 15, 2015 15:18:17 CEST

Alfonso<-Judy

Alfonso,

Thank you for your email. I put **Dale and Sabrina in copy**, as we will be meeting very soon to discuss the AESS website, of which includes Industry Relations. I thought we had all decided that **the third level domain was not the right choice**. ??? Please Dale and Sabrina, can you comment?

Also, we can provide a mysql database.

# (2/2) Backup:summary of email conversation

with R. Oliva,J. Schamman,M. Greco, W. D. Blair

Alfonso ->Judy

Sept. 15, 2015 at 8:30 AM

Dear Judy,  
Thanks.

The third level domain it is not compulsory: the plain solution (if available)  
[www.airw.org](http://www.airw.org) or similar would be fine too.

Sept. 15, 2015 21:37:22 CEST

Alfonso/Judy<-M.Greco

Judy, Alfonso

we are going to discuss this point in detail pretty soon, but the **3 levels won't be applied, nor the [www.airw.org](http://www.airw.org). We have established that all the pages of the AESS must have the same structures.** Anyway, we'll try our best to implement it.