G7 Initiative

2016 Status: www.iarp-robotics.org

AIM: FOSTER INTERNATIONAL COOPERATION in the development of ADVANCED ROBOTICS SYSTEMS able to dispense with human exposure to difficult activities in harsh, demanding or dangerous conditions or environments

Objectives of the Joint Committee Forum:

- to get an updated information on the member’s programs in Advanced Robotics
- to get an updated information on the yearly activities of the mandated working groups
- to plan IARP workshops on topics proposed by the Members
- to inform the European commission on the above mentioned programs and get information on the EC planning in Robotics and related technologies
## Working Groups

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<td><strong>SSRR</strong></td>
<td>Security, Safety, Rescue Robotics</td>
<td>Coord: USA … JPN</td>
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<td><strong>HUDEM</strong></td>
<td>Robotics for Humanitarian De-mining</td>
<td>Coord: BEL (Y. Baudoin)</td>
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<td><strong>DEPEND</strong></td>
<td>Dependability of Robotics Systems</td>
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<td><strong>ASSIST</strong></td>
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<td>Medical Robotics and UltraOperations</td>
<td>Coord: USA</td>
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WG Tasks

• Define a Technical Activity Program (TAP)
• Yearly report on existing Programs/projects and related funds/IARP country
• Yearly formulate according recommendations towards National and International Funding Authorities (updated related roadmap)
• Periodically inform the official members of the IARP on progresses, projects, relevant events, proposal-calls, etc
• Yearly organize a dedicated IARP Workshop
• Inform on and update the list of the members of the WG
• Update a page on the Website http://iarp.isir.upmc.fr
CURRENT and FUTURE
STATUS

EUROPE: 10Mio (Bosnia, Croatia, Ukraine)

AFRICA: 44 Mio (Egypt, Angola, Mozambique)

ASIA: 32 Mio (India, Afghanistan, Cambodia, China, Vietnam..)

Middle-East: >29Mio
AIM

In order to ensure sustained impact on the demining community and value to the general public, but also to support the EU Security facing EH threats (and possibly CBRNE threats) and to welcome, in particular, Experts in Explosive-related issues, it is proposed to create a

EUROPEAN COUNTER EXPLOSIVE HAZARDS COMMUNITY OF EXPERTS (C-EH CE).
The CE integrated in the existing ICI

- The International CBRNE Institute (located in Belgium) has the status of an international NPO accredited by the Belgian Government: it has been funded by the HOTZONE Solutions (The Netherlands) and will also become a Centre of Assistance and Protection for the OPCW (ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS)
- Our structure has been integrated in the ICI structure
European Counter Hazardous Explosive Threats Community of Experts

Beside the tools specifically developed for Mine actions, it’s quite essential to face new challenges: April 2016, new countries have been affected by the plague of disseminated unexploded devices, landmines but also cluster munitions (now directly concerned by the OSLO treaty). New dangers arise in some North African Countries, Middle East and Asian Countries, called Improvised Explosive Devices (IED) and slowing the difficult tasks of Deminers; Furthermore a lot of Chemical precursors allow the dangerous spread of Explosive threats.

Therefore, the ICI/EKC will invite Experts in Explosive to join our Community and answer the European SECURITY calls focusing on the improvement of efficient tools.

SEC 21 GM 2016-2017
Participatory research and innovation via Science Shops (read http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2258-swafs-01-2016.html): This topic will provide support to universities, and other research performers, to establish or strengthen science shops throughout Europe, and beyond. Science shops will serve to demonstrate how students and researchers can assist communities tackle real life problems or explore opportunities for sustainable futures. With support of the ICI/EKC, we suggest to improve synergies between all Centres focusing on the Humanitarian Demining in view of the Systems and Security challenges of the European Union

Swafs-01-2016
the situation in Syria

by Thomas van Linge (@arabionness)
Map of concentration and intensity of terrorist attacks, 2013. Source: Global Terrorism Database (GTD). Available at: http://www.start.umd.edu/gtd
DISSUASIVE

COMPREHENSIVE CONTINUED DEVELOPMENT AND IMPLEMENTATIONS OF SURVEILLANCE ACTIONS AGAINST IMPROVISED EXPLOSIVE THREATS

SEC FCT 11 2016
Some conclusions

• New MATURE technologies appear on the market but RELUCTANCE among HD Community still BRAKES progresses

• RIGIDITY of some Standards: need for continuous revision of CWA, as in all other sectors (IMSMA- TIMS –RPAS)

• Experienced Experts still promote the classical Mine Action Tools despite the changing context of the threats (cots/effectiveness of new technologies decrease, IED, Higher competence level of MAC Staff, Technology Transfer....)

• Military Demining Services are still valuable actors: why doesn’t some members of the HD Community accept their involvement despite their current actions in emerging conflicts?

• Robotics systems are no more utopic solutions (UAV + UGV): trime to act ...Multi-sensor heads/MD Arrays/ GPR Arrays/Chemical Sensors....are no more utopic solutions: time to use them...THINK C-IED and even C-CBRNE

• Remember the COPENHAGE recommendations: compare the cost effectiveness of current techniques with the Cost effectiveness of new promising technologies and procedures!!

• Don’t forget dual use and,please, ENCOURAGE RD in Humanitarian Issues