

iNTeg-Risk Info Sheet (July 2012)


From

iNTeg-Risk

to

E2R2

The European Emerging Risk Radar initiative – a discussion note

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Start/End: Dec. 1, 2008 to May 31, 2013

The starting point: The iNTeg-Risk project

iNTeg-Risk is a large-scale integrating project aiming at improving management of emerging risks, related to "new technologies" in European industry. The project has proposed a new management paradigm for emerging risks as a set of principles supported by a common language, agreed tools & methods, all integrated into a single framework. The project main aim is to reduce time-to-market for the new technologies "made in EU" and promote safety, security, environmental friendliness and social responsibility as a competitive advantage and a trademark of the EU technologies. The project involves leading EU industries and renowned R&D institutions. It is coordinated by the European Virtual Institute for Integrated Risk Management, the company founded with the goal to ensure sustainable use and exploitation of project results after the project end in May 2013. The E2R2 initiative proposed here is one of the ways of achieving this goal.

The way: Use the main project results – main elements available so far (May 2012)

- *RiskAtlas* is a system for mapping of emerging and other risks with over 200 layers of data related to hazards and vulnerabilities, such as earthquakes, hazardous materials, industrial plants and similar; the emerging risks can be "recognized" by screening the list of calculated "risk distances" for the hazard-vulnerability pairs of points in the respective layers.
- *RiskEars* is a database system for acquisition and monitoring of early warnings. From the first "notions" indicating that something can become a threat, RiskEars enables to manage and follow the further development or maturation of the notion towards a full-scale risk. The approx. 900 "notions" collected so far are those collected and analyzed in the project (the so-called iNTeg-Risk ERIs and ERRAs).
- *iNTeg-RiskRadar* provides the way to visualize and analyze the notions in RiskEars. In addition it feeds RiskEars with the inputs from web-analysis (on-line analysis of web contents, social networks monitoring, Twitter monitoring).
- About 20 other new *applications/tools*, including, for instance, the "Intelligent Agent Based New Technology Acceptance Analyzer" are all part of "iNTeg-Risk 1StopShop", the project web- and delivery platform.
- *CWAs*: iNTeg-Risk Consortium has started the work on a CEN Workshop Agreement Nr. 67:2011) aimed to the standardization of approaches to analysis of emerging risks. A liaison between this activity and ISO PC262 (ISO 31000) has been established.



The goal: The E2R2 initiative & benefits

The European Emerging Risk Radar (E2R2) initiative is envisaged as a platform enabling to recognize, monitor and manage new/emerging risks at the European level. Avoiding and mitigating such risks will be a strategic global advantage of the EU (cf. WEF 2011 Global Risk Report [weforum.org](http://www.weforum.org)).

The multi-channel inputs for E2R2 are planned to come from (a) experts, (b) research projects, scientific publications, (c) web publications, social/professional networks (e.g. Twitter) and (d) general public. Privacy and strict control/protection of data must be ensured. The outputs are also expected to be multi-channel, containing items like monitoring risks in time, delivering alarms and alerts, providing timely and on-the-fly short info about emerging risks (the RiskSpark "2 pager"), statistics, scientific opinions, priority lists (e.g. the "Top 5" lists, e.g. largest risks, largest risks in an application area, fastest growing risks... largest risks for the region...). The Radar should also feed the on-line dynamic newsletters looking at issues like "Risks of the month", "Just appeared" and similar. The Web 2.0 and 3.0 solutions are envisaged for supporting the participative character of E2R2 and an open set of dedicated tools will be included/linked to it.

Possible action plan

The European Emerging Risk Radar initiative is envisaged as also as one of the potential ways to ensure sustainability of the iNTeg-Risk results. The Radar is envisaged to start its operation at the end of iNTeg-Risk project (May 2013). The initiative will seek endorsement/interaction with stakeholders such as, on the public side, SCENIHR (EU Scientific Committee on Emerging and Newly Identified Health Risks http://ec.europa.eu/health/scientific_committees/emerging/index_en.htm) and important players, such as, e.g., CRO Forum, on the industry side. As a follow-up and extension of the current iNTeg-Risk RiskRadar, the E2R2-Radar is envisaged to follow the tentative calendar below:

- June 2012
basic concept discussed with main stakeholders and the "endorsements" from EU DGs, industry, professional and national organizations obtained
- September 2012
the blue-print of the activity prepared and the main implementation agreements made
- May 2013
first prototype of E2R2 created within the iNTeg-Risk project and presented at the final iNTeg-Risk project conference (May 22-23, 2013).

Who should/could be involved?

The E2R2 initiative will be

- open for different types of inputs and stakeholders and, at the same time,
- able to guarantee the right handling of safety relevant information.

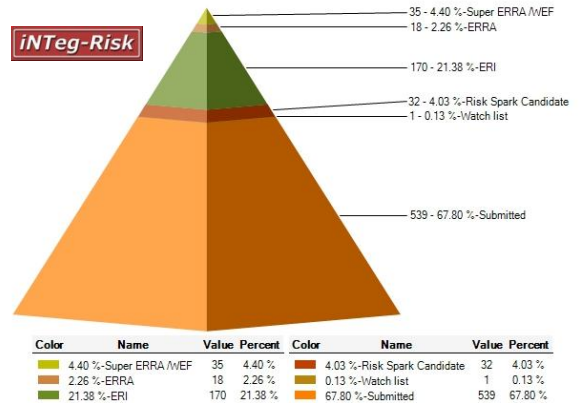
The preliminary and very tentative list of possible stakeholders includes the following groups:

- Governmental and EU organizations (e.g. OSHA, STOA, EU Scientific Committees like those dealing with health risks (SCENIHR), environmental risks (SCHER), consumer safety (SCCS), and DGs Health, Enterprise, Energy, Environment, Research, etc.)
- Professional Groups and national and international organizations (e.g. such as CRO Forum for insurance industry, BBK, RIVM, IRGC, SRA, ESRA ...)
- Single industries or companies (space and aerospace, energy sector, materials, insurance, automotive, ... e.g. SwissRe, AXA, EDF, Allianz, TÜV, GDF-Suez, ENI, Iberdrola and others already partners in iNTEg-Risk)
- R&D and academia (Institutions like BfR, KIT, ZIRIUS, BAM, INERIS, MIT, Harvard, Wharton, other universities, ...)

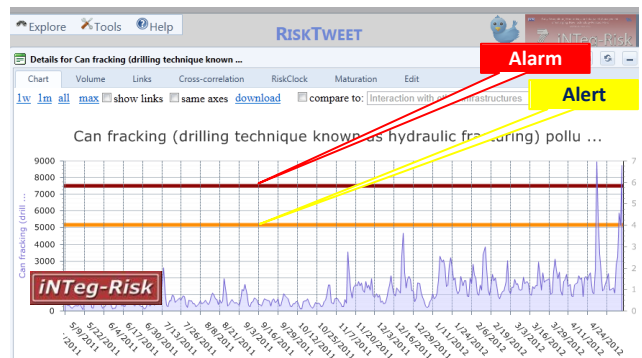
The "vehicle" iNTEg-Risk 1StopShop

The interface includes sections for:

- My Analyses:** Risk Radar (Environmental, Socio-Political, Economic/Financial, Regulatory/Legal), Tools (RiskFears, Risk Atlas, MCDM TOOLS, New Technologies Acceptance (ABM), Notion Clustering (S-RD1)), Specific tools (SwissRE_ARM, ERRA CS Demo, Nanotechnology evaluation).
- Background tools:** iNTEg-Risk Safetypedia, iNTEg-Risk Education, ENISFER, MethodsMart, Survey Tool.



The early warnings/signals are collected as emerging risk "notions" and then processed and displayed at the risk radar...



... data about emerging risks come to risk radar through different channels, e.g. expert opinions, web analysis, Twitter, etc.

Main goal: "Participative Risk Governance" and ...

Safety and security are among the sectors so far the least affected by the globalization. But there are no real reasons to believe that it will not change and that the general public will require not only more information about the issues of concerns (natural hazards, industrial technology, possibly harmful products...), but will also require more ways to take a more active role in establishing and implementation of the safety-related policies in the risk-informed society.

... a "recognized reference source of information" about emerging risks

In addition, in the "global information jungle" the systems like European Emerging Risks Radar can provide a source of credible and reliable information for the scientific community, industry, SMEs and general public.

Fracking is a process in which water and toxic chemicals are injected at high pressure into the ground to break up rocks and release gas trapped there. For decades, oil and gas industry executives as well as regulators have maintained that this drilling technique, which is used for most natural gas wells has never contaminated underground drinking water. This is because fracking occurs thousands of feet below drinking-water aquifers, and so drilling chemicals pose no risk of

How much would it cost? Can PPP really work? How to make it happen?

The issue will need further brainstorming, but the cornerstones of the envisaged solutions are: (1) profit out of the, already made, 20 million € EU-investment in iNTEg-Risk, (2) PPP – public-private partnership, (3) involve the EU institutions, (4) embed E2R2 in Horizon 2020, e.g. in SafeFuture, E2R2 should "serve" other RTD projects, and (5) explore new ways of scientific and professional networking.