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Critical Systems Failure Poses Greatest Technological Threat to World, Report Warns

- Systems failure that could lead to meltdown of vital networks poses the most significant technological risk
- Other technological risks include cyber attacks, unintended consequences of nanotechnology and the proliferation of space debris in the same orbits as satellites
- Report analyses top 10 risks in [economic](#), [environmental](#), [geopolitical](#), [societal](#) and [technological](#) categories
- A dystopian world, unsafe safeguards and the dark side of connectivity are this year's major risk cases
- Read *Global Risks 2012* report in full: <http://www.weforum.org/globalrisks2012>

London, United Kingdom, 11 January 2012 – Chronic systems failure leading to a meltdown of vital information infrastructure and networks is seen as posing the greatest technological risk to the world over the next ten years, the World Economic Forum's *Global Risks 2012* report has found. Systems failure is perceived as the most systemically important among the technological risks evaluated because of its impact and influence on the others. These are among the findings of the Risk Response Network's survey of 469 experts and industry leaders, published today.

In the technological section, 10 long-term risks were evaluated: chronic systems failure, cyber attacks, the failure of intellectual property regimes, the mass dissemination of false information online, a massive incident of data fraud or theft, mineral resource supply vulnerability, the proliferation of space debris in satellite orbits, along with the unintended consequences of climate change mitigation, nanotechnology and new life sciences.

In addition to technological risks, the full report also includes economic, environmental, geopolitical and societal categories of global risks. An analysis across all five categories revealed three constellations of risks that were developed into case studies for this year's report.

Case 1: Seeds of Dystopia

Bulging populations of young people with few prospects, growing numbers of retirees depending on debt-saddled states (stoking fiscal imbalances) and the expanding gap between rich and poor are all fuelling resentment worldwide. Collectively, this constellation of risks could unwind the gains of globalization by driving populism, nationalism and protectionism.

"Individuals are increasingly being asked to bear risks previously assumed by governments and companies to obtain a secure retirement and access to quality healthcare. This report is a wake-up call to both the public and private sectors to come up with constructive ways to realign the expectations of an increasingly anxious global community," said John Drzik, Chief Executive Officer of Oliver Wyman Group (Marsh & McLennan Companies).

Case 2: Unsafe Safeguards

Policies, norms and institutions from the 20th Century may no longer protect us in a more complex and interdependent world. The weakness of existing safeguards is exposed by a constellation of risks related to emerging technologies, financial interdependence, resource depletion and climate change, leaving society vulnerable.

"We've seen examples of over-regulation, like the response to the Icelandic volcanic eruptions, or under-regulation, such as the subprime or Eurozone crises. We need to get the balance right with regulations and, to that end, our safeguards must be anticipatory rather than reactive. It's equally important that regulations be made more flexible to effectively respond to change," said David Cole, Chief Risk Officer at Swiss Re.

Case 3: The Dark Side of Connectivity

Our daily lives are almost entirely dependent on connected online systems, making us susceptible to malicious individuals, institutions and nations that increasingly have the ability to unleash devastating cyber attacks remotely and anonymously. There exists a constellation of risks familiar to the digital world that poses a real threat to the physical world.

"The Arab Spring demonstrated the power of interconnected communications services to drive personal freedom, yet the same technology facilitated riots in London. Governments, societies and businesses need to better understand

the interconnectivity of risk in today's technologies if we are truly to reap the benefits they offer," said Steve Wilson, Chief Risk Officer for General Insurance at Zurich.

Natural disasters also remind us of the devastating power of nature and the limits of technology, as witnessed by last year's Great East Japan Earthquake and subsequent crisis at the Fukushima nuclear plant. In a special chapter on [key lessons](#) to be gleaned from the disaster, the report stresses that organizations are far more resilient to major shocks if they have clear lines of communication and employees across the organization are empowered to take decisions.

The seventh edition of the report describes 50 global risks and groups them into [economic](#), [environmental](#), [geopolitical](#), [societal](#) and [technological](#) categories. Within each category, the most significant systemic risk is singled out. The report also highlights "X Factors" – emerging concerns with still unknown consequences which warrant more research. These include a volcanic winter, cyber neotribalism and epigenetics.

The three risk cases, Japan and X Factors are the focus of special sessions at the World Economic Forum Annual Meeting 2012 in Davos-Klosters, Switzerland, taking place on 25-29 January.

Published in cooperation with Marsh & McLennan Companies, Swiss Re, The Wharton Center for Risk Management and Zurich, *Global Risks 2012* is the flagship initiative of the World Economic Forum's Risk Response Network. The Risk Response Network provides private and public sector leadership with an independent platform to better map, monitor, manage and mitigate global risks.

Notes to Editors

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Read the *Global Risks 2012* report in full at <http://www.weforum.org/globalrisks2012>

Watch the report launch press conference live at 09.30-10.30 GMT on 11 January 2012 or replayed at <http://livestream.com/worldeconomicforum>

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