

# Financial Risk Management (FRM) and Enterprise Risk-Management (ERM) Convergence<sup>1</sup> (Manifesto)

Nowadays, there is an urgent need in **updating ERM standards with present-day FRM technology advancements** based on financial and actuarial mathematics. Besides, risk assessment techniques should better than ever **consider the interaction of different risks, business cycle, human factor and other global risk factors**. Finally, modern risk management technologies **should become even more accessible for application in small and medium-sized enterprises** where risk management is currently too expensive for efficient application.

In this regard, we should identify a number of innovations requiring more attention while developing the ERM standards, including ISO 31004 Risk Management — Guidance for the implementation of ISO 31000, etc.

Firstly, this involves the **analysis of operational and strategic risks (prevailing in the real sector activities) on the basis of modern financial risk management approaches**. In particular, when presenting modern approaches to risk assessment it is required to emphasize the importance of time series analysis, the analysis of global risk factors, including the human factor, the space and earth weather, the cyclical nature of the economy, etc. Special attention should also be given to different types of risk relationships in the portfolio (correlation, cointegration and others) to be taken into account in the portfolio approach. The ERM standards should be supplemented with references to such basic risk management methods as portfolio diversification, immunization, securitization and hedging, including those related to business process portfolios.

Secondly, **external statistical data can be much more actively used in risk assessment**. For this purpose, the important role of public data and indices<sup>2</sup> should be highlighted in the ERM standards, and special attention should also be given to the prospects of using crowdsourcing technology via mobile Internet<sup>3</sup> (with a glance to some caution regarding data quality). This is especially important for small and medium-sized companies which either lack evidence or have limited capability to collect and evaluate relevant incident data.

Thirdly, **risk management effectiveness evaluation technologies should result in quantitative estimation of risk management value, and modern assessment method achievements should be taken into account**. For this purpose, the important role of modern approaches to risk budgeting and capital allocation (Capital-at-Risk, Risk adjusted return on risk adjusted capital (RORAROC), and related risk measures<sup>4</sup> should be specified in the ERM standards, as well as the real options theory (ROV) as the base for the effectiveness measure of risk management value<sup>5</sup>. Besides, it is also required to increase emphasis on the importance of ensuring a sufficiently high sensitivity of risk appetite to the changes of the risk context.

Fourthly, it is desirable that **the ERM standards are harmonized with the sustainable development standard requirements<sup>6</sup>**.

It would be appropriate to focus efforts in this direction by creating a working group (subcommittee) to handle FRM and ERM convergence issues, if necessary.

*PhD, Ass. Prof. Mikhail Rogov,  
ISO/TC 262 Risk management, expert (GOST R, Russian Federation)  
RusRisk (FERMA), Vice-President  
Management Board of Russian Branch PRMIA, member  
UNECE (GRM), risk management expert  
JSC RusHydro, Advisor to the director for internal control and risk management  
The University of Dubna, Economics dept., Ass. Prof.  
August, 2011, Moscow, Russia*

<sup>1</sup> For the draft of ISO 31004 standard, etc.

<sup>2</sup> For example, volatility indices, credit spread indices, space weather indices, etc.

<sup>3</sup> For example, the Ushahidi technology

<sup>4</sup> Value-at-Risk, Short Fall, Stress VaR, etc.

<sup>5</sup> When risk management can provide the deviation of the volatile key performance indicators (KPI) within the set of limits based on the risk appetite of an organization, its risk management value can be estimated as the value of the real option portfolio. The underlying asset of the options are relevant KPIs, the spot prices are the planned KPI values, strike prices are the levels of limits on deviations from the KPI target values, the time remaining until expiration of the option is the planning horizon.

<sup>6</sup> In terms of the Global Reporting Initiative (GRI).